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13

MONETARY COMMISSION.

MARCH 2, 1877.—Ordered to be printed.

Mr. BLAND, from the Joint Select Committee on the Monetary System, submitted the following

REPORT:

The commission created under the joint resolution of August 15, 1876, *submit the following report:*

The resolution creating the commission and defining its duties was as follows:

> *Resolved by the Senate and House of Representatives,* That a commission is hereby authorized and constituted, to consist of three Senators, to be appointed by the Senate; three members of the House of Representatives, to be appointed by the Speaker; and experts, not exceeding three in number, to be selected by and associated with them: with authority to determine the time and place of meeting, and to take evidence, and whose duty it shall be to inquire—
>
> First. Into the change which has taken place in the relative value of gold and silver; the causes thereof, whether permanent or otherwise; the effects thereof upon trade. commerce, finance, and the productive interests of the country, and upon the standard (of) value in this and foreign countries;
>
> Second. Into the policy of the restoration of the double standard in this country; and, if restored, what the legal relation between the two coins, silver and gold, should be:
>
> Third. Into the policy of continuing legal-tender notes concurrently with the metallic standards, and the effects thereof upon the labor, industries, and wealth of the country; and
>
> Fourth. Into the best means for providing for facilitating the resumption of specie payments.

The commission as organized consisted of Messrs. John P. Jones, Lewis V. Bogy, and George S. Boutwell of the Senate, Messrs. Randall L. Gibson, George Willard, and Richard P. Bland of the House of Representatives, Hon. William S. Groesbeck, of Ohio, and Prof. Francis Bowen, of Massachusetts. George M. Weston, of Maine, was appointed secretary.

The sessions of the commission were held in the city of New York until the re-assembling of Congress in December last. They have since been held in the city of Washington.

Immediately after the creation of the commission, circulars were issued to bankers, publicists, and commercial men in this country, and to eminent financial authorities in Europe, and (through the State Department) to the representatives of the United States in foreign countries. These circulars contained interrogatories which were intended to elicit the widest possible information upon all the topics covered by the resolution of August 15, 1876. The chambers of commerce in the leading cities in this country were invited to furnish, and did furnish, lists of the persons most likely to be able to give information.

A large number of persons appeared before the commission, who were orally examined. In addition, numerous written papers from various sections of this country were received in answer to the circulars of the commission. These papers, as well as the oral testimony taken down by stenographers, are reported herewith.

Our ministers abroad have exhibited a patriotic and intelligent zeal in collecting official and other information in the countries to which they are accredited. The documents which they have furnished are very valuable, and some of them not attainable except through official applications. Some of our ministers have added able and interesting original papers. All these documents and contributions are herewith submitted.

The commission are much indebted to the Secretary of State for his prompt and courteous co-operation in facilitating their communication through his Department with our ministers abroad.

They are also indebted to the Bureau of Statistics, which promptly and courteously furnished all the information asked for.

Several gentlemen in Europe, eminent as financial authorities, have addressed communications to the commission, which are among the submitted papers. One of these gentlemen, M. Cernuschi, appeared personally before the commission, and furnished important and valuable information, which will be found in the reported testimony. The thanks of the country are due to him and to the other distinguished citizens of foreign nations who have made these disinterested efforts in the elucidation of a question important to the welfare of mankind.

There are also submitted herewith special reports of the secretary of the commission upon European and American legislation in respect to subsidiary coinage and upon other subjects.

In respect to the preparation of the minute on the production of silver in the United States, it may be stated that, in 1873, a new body of paying ore was discovered in one of the mines of the Comstock lode in Nevada. Similar bodies of nearly equal extent had been previously discovered and exhausted in the Spanish-American silver-lodes and in the Comstock lode, without attracting universal attention or arousing universal fear that the commerce of the world was about to be deluged by a flood of silver, but in the present instance, through persistent and infectious exaggerations in respect to the extent and richness of the new ore-body, the most visionary expectations and unwarranted fears became universally epidemic. The estimates of the value of the ore in sight ranged from $300,000,000 to five times that amount, all of which was generally believed to be in silver. The probable out-turn of this new bonanza is a leading topic in the report of the British silver commission, (1876,) which contains, among other evidence on the subject, a quotation from a German newspaper, the *Reichsanzeiger*, of March 14, 1876, which gives, as foremost of the "three principal causes for the depreciation of silver:"

> 1st. The discovery of the great and celebrated silver-mines in Nevada, which in reality produce fabulous quantities of silver, the production for the current year being valued at five hundred million francs.

Deeming it of the first importance that these estimates and statements should be subjected to a practical and careful scrutiny, this commission employed Mr. Alexander Del Mar, a gentleman technically qualified for such an investigation, to visit the mines in person, and ascertain from original sources their past and prospective production, and also generally to inquire into the silver production of the United States, and its sources.

The result of this mission will be found in the *Minute on the Silver*

Production of the United States, referred to above. Minutes prepared by Mr. Del Mar on the coinage of the United States since 1792, annual production of silver throughout the world, annual production of gold throughout the world, and on other subjects are also reported herewith.

The yield of every mine in Nevada, annually, for sixteen years, has been ascertained with precision, and of the larger mines the yield by months. The statistics have as yet been collated only for the calendar years 1871 to 1876, inclusive; the previous years, being of less importance in the present connection, have been left for future attention.

In addition to this work, the testimony of the persons in San Francisco who have compiled the generally-accepted statistics of the production of the precious metals in this country, was taken with the view of ascertaining their methods of computation and the reliability thereof.

Briefly, the investigation shows that the product of the Big Bonanza thus far has not exceeded $52,500,000 during the four years that it has been worked, making an annual average of about $13,000,000, of which 45 per cent. was gold, leaving for the average annual product of silver from this ore-body a fraction over $7,000,000.

Taking all the mines of the Comstock lode together, during sixteen years of unprecedented activity in mining, assisted by the most perfect and powerful mechanical appliances, there have been found some twelve or thirteen ore-bodies, which have yielded, altogether, about $240,000,000, or an annual average of $15,000,000, of which about forty-seven and one-half per cent., or $7,125,000, was gold, leaving $7,875,000 as the average annual production of silver.

The silver product of the State of Nevada has been collated only for the six years ended December 31, 1876. During this period the average annual product was $19,000,000, and for the year 1876 by itself only $28,000,000, instead of $100,000,000 so confidently stated by the *Reichsanzeiger*.

The silver product of the United States during the same period was $155,600,000, making an annual average of $26,000,000; the product for 1876 by itself was $38,200,000. When these returns are contrasted with the computations which have hitherto obtained currency, it will be seen that the latter have uniformly and greatly exaggerated the production of silver in this country.

America, since its discovery, has been the chief source of the world's supply of the precious metals; and, as the proportion of silver in that supply was much greater prior to the California gold discoveries than it was in the Old World, either before or after the discovery of America, the opening of the American mines was followed by, if it did not cause, a considerable, although slow, widening of the relation between the two metals. Humboldt (Fluctuations in Supply of Gold, published in 1838) says:

> The relative value of gold and silver fluctuated during the first hundred years subsequent to the discovery of the new continent between 1 to $10\frac{7}{10}$ and 1 to 12; in the last two centuries, between 1 to 14 and 1 to 16.

Their relative value settled, however, about the middle of the seventeenth century, at between 15 and 16 to 1. In England it was fixed by Sir Isaac Newton, in 1717, at about $15\frac{1}{5}$ to 1. At the commencement of this century (1803) France conformed to the mean of the relations existing at that time by fixing it at $15\frac{1}{2}$ to 1. The fluctuations in the relative market value of gold and silver were unimportant during the present century until 1873, when the German and American laws to demonetize silver were enacted. The determination of Germany to enact such a law had been previously announced by the decree of December

4, 1871, and the American movements to the same end, which seem to have been better understood in Europe than in this country, were commenced as early as 1868.

The general money system of Europe had been that of the double standard until 1873. The conspicuous exceptions were Holland, which had been during much the larger part of its history a single silver standard country, and England, which had adopted the single gold standard in 1816 by law and in 1821 in fact. In consequence of the apprehensions of a fall in the value of money, or, what amounts to the same thing, a rise in wages and in the price of property, excited by the California and Australian yield of gold, Belgium adopted a single silver standard in 1850, and the German States in 1857. Belgium, however, returned to the double standard in 1861.

Germany and the United States demonetized silver in 1873. At that time it was neither depreciated nor unsteady in value, nor had any change occurred in the relative production, consumption, or distribution of the precious metals to indicate its depreciation in the future, nor was any actual or probable depreciation assigned as a reason for its demonetization. The average flow of silver to India was undisturbed, and the Big Bonanza in the Comstock lode was undiscovered. Manifestly, the real reason for the demonetization of silver was the apprehension of the creditor classes that the combined production of the two metals would raise prices and cheapen money unless one of them was shorn of the money function. In Europe this reason was distinctly avowed.

It cannot be successfully controverted that the sole causes of the recent disturbance in the relative value of gold and silver were the demonetization of silver by Germany, this country, and the Scandinavian states, and the closure of the mints of Spain, Holland, and the Latin Union against it. Twelve months ago two other causes were insisted upon, namely, the falling off of the India demand for silver and an enormous actual and anticipated yield of silver by the Comstock lode. The Asiatic demand is fully restored, and the actual silver production in Nevada is now not only more correctly understood, but discussion has established the general conviction, which has always been that of the soundest authorities, that no increase in the production of the precious metals which is at all probable would have any immediate appreciable effect upon either their combined or relative value.

Humboldt (Fluctuations, &c., 1838) says:

> In the modern world, the universality and rapidity of communication, which restore the equilibrium *as well as the amount of the accumulated masses of gold and silver already existing*, tend to render still more stable the relative value of the metals. * * * *The enormous masses of precious metal already accumulated in Europe* render any considerable or continued variation in the relative value of gold and silver impossible. Experience has shown this. In England, for instance, in the ten years from 1817 to 1827, more than 1,294,000 marks of gold [$180,959,000] were converted into money, and yet this monopoly of gold only raised the proportion of it to silver from 1 to 14.97 to 1 to 15.60. * * * Any increase in the production which our imagination could call into existence would appear infinitely trifling compared with the *accumulations of thousands of years now in circulation.*

Changes in the relative value of the two metals are entirely different from changes in their absolute value or, in other words, their value as compared with all other things. Thus one metal may have fallen greatly as compared with the other, and at the same time not only may not have lost, but may even have increased in purchasing power. In describing a divergence in the relative value of the metals, without reference to the purchasing power of either, it is as correct to say that one has risen in value as to say that the other has fallen. In fact, looking only to the relation of the metals, both things have occurred. One has fallen and one has risen, each relatively to the other, to the full extent of the divergence. In order to ascertain whether silver has fallen or gold risen since 1873, not relatively to each other, but relatively to all other things a comparison must be made between general prices in gold and silver respectively, then and now. Such a comparison would show that the purchasing power of gold has increased since then in all countries, and that the purchasing power of silver has decreased in none.

The discussion of the use of silver as money involves several questions, which, if not divisible, are distinguishable; or, in other words, if so intimately connected as not to be susceptible of a separate decision, they are yet so distinct that it will subserve the purpose of both clearness and convenience to consider them separately.

The first is, whether the universal employment of silver as money coextensively and concurrently with gold in times past has been, upon the whole, justified by adequate considerations.

The second is, whether, if so justified heretofore, new conditions have arisen to make this employment of the two metals inexpedient at the present time.

The third is, whether the discarding of either of the two metals as money, would not cause such a fall in the prices of commodities and property, and consequently impose such unjust and ruinous burdens on debtors, individual and national, as to be justifiable on no plea of convenience, and defensible only on the plea of absolute necessity.

The fourth is, whether the employment of silver as money by the United States is a practicable policy in view of its actual demonetization in several countries and of its threatened demonetization in others.

The fifth is, whether, if the policy be practicable, it is demanded, or otherwise, by the commercial, industrial, and financial interests of the United States.

I.

OBSERVATIONS UPON THE GENERAL QUESTION OF EMPLOYING THE TWO PRECIOUS METALS AS MONEY.

The question of the desirability and utility of using both gold and silver as money metals has been decided in the affirmative by the general judgment and practice in all historical times. This statement may possibly require some explanation in respect of India and China, which contain the two greatest masses of human population, and, upon common estimates, rather more than one-half of the total population of the globe. Gold cannot take the place of silver as the money of those regions, because gold is too valuable to measure the small earnings and expenditures of their inhabitants. In India, under the British administration, silver is the only legal-tender. What the legal tender may be in China is obscure, but in respect to the inhabitants of both China and India, and more especially in respect to the ruder populations in other parts of Asia and in Africa, the legal-tender quality of money is of far less importance to them than it is to the highly civilized populations of Europe and America. The ramified system of credits, frequently on long time, and sometimes perpetual, which seems inseparable from a high civilization, is unknown to the majority of the human race, to whom the principal use of money is to make purchases, and not to pay debts. The amount of gold is small as compared with the amount of silver in the East. Gold is not the money of the East, nor are the prices there influenced by its scarcity or abundance as they are by the scarcity or abundance of silver. But it is readily accepted as a precious commodity, at about its silver value in London.

In the presence of this general judgment of mankind in favor of using both the precious metals as money, it will be sufficient to state summarily some of the considerations which justify this judgment.

The fluctuations in the aggregate current supply of the two metals are less frequent and less violent than are the fluctuations in the supply of either metal, and consequently the fluctuations in the value of the two, used together as money under the double standard, are fewer in number and less in degree than would be the fluctuations in the value of either one of them, and the chances of avoiding the evils of an insufficient supply of money are much greater. No considerable simultaneous increase of both has occurred since the Christian era, with the single exception of the period when the mines of the New World were opened. Whenever one of the metals has been produced in unusual quantities, the production of the other has generally remained stationary or has declined, so that variations in the aggregate production have been restrained within endurable limits. Thus, there was no increase of the silver yield when gold was produced in unusual quantities from the Brazilian mines and during the first half of this century from the Russian mines. The production of silver remained steady during the first fifteen years of the working of the gold-fields of Australia and California, and did not increase until their productions declined.

Gold and silver are both fit for money, by all the necessary qualities of indestructibility, resistance to chemical changes, divisibility, general steadiness of combined production, and amount of combined stock, which is small enough to make them precious, and at the same time large enough to render them convenient in ordinary handling. They are the only metals which combine these qualities. With augmenting capital, increasing population, the continued spread of civilization and stable government, increased efficiency of machinery, and improved processes of mining, it may be that the production of gold and silver will be increased; but under the conditions named an increased production would be necessary for the preservation of the equilibrium between money and all other things.

The considerable difference in the value of the same weight of the two metals recommends the use of both as money. Gold, in any condition of purity heretofore adopted in coinage, cannot be used for ordinary retail transactions. A gold coin of the value of an average day's labor in Europe, or even in America, would be too small for handling; and in Asia, a gold coin measuring a month's wages would, be inconveniently small. It is very doubtful if any contrivance of coinage could make gold answer the purposes which silver has always answered in the smaller exchanges. The expedient of a gold coin of which the principal weight and bulk should be alloy may be suggested, but the genuineness and real value of such a coin would elude ordinary means of verification; and it is doubtful if it could ever be made to command that ready and universal confidence essential to money. It would be an experiment full of hazard. Silver is especially adapted for coins of small value, which are the only ones used by the masses of mankind, and may be used without inconvenience in the largest transactions as modern appliances have made it feasible to handle even the largest sums of silver without inconvenience. The two metals together fill but scantily the measure of the money needs of the world and they can only fill it upon the condition that both are money in the fullest sense; and nothing is such money if it be restricted in its legal-tender function.

The combined stock of gold and silver is so large in comparison with the amount of their current production that variations in their current supply affect stocks only in a minute degree. A certain percentage of the current supply is constantly needed to keep the stock of the precious metals good against loss by accident, abrasion, and their absorption in the arts. But this is not all that is required. The rapid increase of the world in population and commerce demands a corresponding increase of the stock of the precious metals, in order that the relation between money and all other things may not be disturbed and that the ruin of productive interests by falling prices may be avoided. The greatest gold yield ever known was during the five years ending with 1856. The annual average production during that period was $150,000,000, while the silver production during the same period averaged annually only $40,000,000. This was an enormous increase of the annual gold supply and consequently in the aggregate supply; but the excess of supply in any one year was only an imperceptible addition to existing stocks, and so rapid was its absorption by the increased demands of business, that its effect on prices was not visible for several years, and the maximum increase of prices finally produced, and which was soon lost, did not exceed twenty per cent. Tooke says, (History of Prices, vol. 6, pages 158–194,) that notwithstanding the increase of metallic supplies from 1848 to 1856, there was in 1856 no "*corresponding increase of general prices; nor, in the case of large groups of commodities, any increase of prices whatever, but, on the contrary, prices rather sunk to a lower, than rose to a higher, level.*"

The stocks of gold and silver being much greater now than in 1848, they would be less affected by any new discoveries even of the same importance as those of California and Australia. So, also, new supplies of the precious metals absolutely as great as those of the years following 1848, would be of far less consequence in their relation to the vastly increased amount of commodities, exchanges, and population of the present time.

It is one of the common estimates that in 1848, the date of the California discoveries, the bullion value of the world's stock of plate, coin, and bars was $2,800,000,000 in gold and $4,000,000,000 in silver, but of coin and bars alone $1,200,000,000 in gold and $2,200,000,000 in silver. The total production of gold and silver in the five years ending with 1856 was $950,000,000, being an addition of only 14 per cent. to the total stock, inclusive of plate, or of 28 per cent. to the stock in coin and bars. The total production of gold alone in the same years was $750,000,000, which was an addition of 25 per cent. to the entire stock of gold including plate, and the still greater addition of 62½ per cent. to the stock of gold in coin and bars. In the twenty-eight years ending with 1875, the aggregate production of gold and silver was $4,582,000,000, which was an addition of 67 per cent. to the stock in 1848 of coin, bars, and plate, and of 135 per cent. to the stock of coin and bars. But in the same twenty-eight years, the production of gold alone was $3,215,000,000. This was an addition to the gold stock in 1848 in coin, bars, and plate of 115 per cent., and to the stock in coin and bars of 268 per cent. Estimates of the amount of the world's stock of the precious metals in 1848, or in any year, vary considerably, but on any estimate the two facts are illustrated that annual supplies affect stocks of the precious metals slowly, and that the stock of either one of the metals is more exposed to eccentric enlargement than is the aggregate stock of the two.

The magnitude of the stocks of silver and gold in the world is an element of steadiness in their value which is frequently overlooked. The familiar maxim that value is regulated by supply and demand, is applied to money in a very loose and inaccurate way. That supply, which is one of the principal factors in controlling the value of both commodities and money, is not the annual supply, but the entire stock in existence, including past accumulations as well as current production. In the case of wheat, cotton, and similar things, the amount of each harvest is so great in comparison with the amount left over from the previous harvest that supply and annual supply are frequently used as meaning the same thing; but the difference between the two is very considerable, even in respect to commodities of that description. The difference between the supply left over and the annual supply of the precious metals is enormous, and to describe their value as being controlled, or even much influenced, by their annual supply, is absurd. That supply, which is one of the controlling elements of their value, is their entire stock, old and new, just as it really is with wheat, the only distinction being that the annual supply is the principal part of the stock of wheat, while it is hardly an appreciable part of the stock of the precious metals. The value of the precious metals will be affected not by the entire current production but by the surplus which enters the circulation after consumption in the arts and all losses by abrasion and accident have been made good, and after supplying that new demand for money which results from the growth of population and from the enlarged uses always following an increase of money. No current supply was ever yet sufficiently great to affect the value of the precious metals except slowly and almost imperceptibly. The signs for the future are that the annual production will be deficient rather than excessive.

Tooke (History of Prices, vol. 6, page 232) says of the influx of the metals after the discovery of America in 1492:

> No rise of prices can be discovered until 1570, fifty years after the entry of the Spaniards into Mexico, and almost thirty years after the discovery of the Potosi silver mine. The ultimate range of prices was not reached until 1640.

This will appear the more remarkable when it is considered that the world's stock of gold and silver was exceedingly small when America was discovered. Chevalier estimates the stock in Europe at that time at only $193,000,000. It was greater in Asia, where some authorities conjecture that it may have been $1,500,000,000. But manifestly the whole stock was only a small fraction of what now exists, and consequently had far less power than the present stock to resist the disturbing influences of extraordinary additions. This steadiness of value, resulting from magnitude of stocks, will of course become still greater as stocks are hereafter enlarged.

The processes by which supply affects the value of money and commodities are essentially different. An oversupply of a commodity manifests itself in a surplus for which there is no effective demand, and which must be carried as a dead weight with the losses of interest, storage, and insurance, and in the case of most commodities, of waste and deterioration. The depressing effect on the market of an oversupply of commodities is out of proportion to the actual percentage of the oversupply. But in the case of the metals used as money, whatever the supply may be, there is no part of it which is a surplus or dead weight. It is all wanted and all wanted alike. There is an instant and ready use for the whole of it because it can be speedily coined and put into the circulation on an equal footing with the money already in circulation. Undoubtedly, if the demand remains the same, an increased supply of the metals will finally affect their value, not immediately, however, because not visibly manifested by a surplus, and at last only in the same proportion as the entire stock has been increased by the increased supply. But the demand never does and never can remain the same when the production of the metals used as money is so increased as to raise the price of commodities. Commerce and all productive interests are instantly and decisively stimulated by rising prices. This fact has been signally illustrated during this generation. The extraordinary gold-production in California and Australia was quickly followed by a new demand for money which arose from that business activity and prosperity which always attend an increase of money. This demand soon overtook the new supply and already threatens to outrun it.

Money and commodities differ as much in the nature of the demand for them as they do in the effect of supply upon their value. The demand for money is universal, constant, and insatiable. Nobody ever had so much as to feel a loss or even a diminution of the desire for more. In business transactions it is never voluntarily parted with except with the hope of its return and with a profit. The effective demand for it, or, in other words, that demand which is accompanied by an ability to offer equivalents, is only limited by the extent of all the possessions of mankind, fixed and movable, and their total capacity to render services.

And by thus understanding exactly what supply and demand mean as applied to the metals used as money, the reasons for the steadiness of their value become apparent. Their supply is the accumulated stock of centuries, and the demand for them is measured by all the wealth and all the productive forces of man.

What is known as the double standard of value, is a standard based upon the two metals, gold and silver, by laws which establish a unit of value and account in each metal and declare the weight of pure gold and silver respectively, which the unit shall contain, and which also establish unrestricted coinage for both metals, and declare coins of both metals, respectively, which represent the unit and multiples thereof a legal tender in the payment of all debts, public and private, at the option of the debtor. The legal relation of value between the metals will be in inverse proportion to the weights of pure metal in the coined units of the two metals respectively. Thus, the weight of pure silver, 371.25 grains, in the demonetized silver dollar, or unit, was 15.9888 greater than that of the pure gold, 23.22 grains, in the gold dollar or unit, which was a legal valuation of a given weight of pure gold 15.9888 times greater than of the same weight of pure silver.

There can never be practically two money standards whose units of account differ in value in any country at the same time. It is all-important that the value of the standard should be unchanging. It is not important that the material which represents the value should be unchanging. It is of little consequence of what the material consists if it be portable, divisible, and indestructible, or, if destructible, that it can be replaced with facility. There should never be any hesitation in changing the material of money for the purpose of maintaining its value undisturbed.

Whenever, under the double standard, there is a variance between the legal and market relations of the metals the standard would be practically based on one metal, and it the cheaper and more available one. Whenever the legal and market relations of the metals coincide there would be duality in the material of the standard, but unity in its value which would make it in its all-important feature, a single standard.

The philosophy of the double standard is, that a rise in the value of money and a fall in general prices are the greatest evils which can befall the world, and its object is to prevent, as far as possible, the occurrence of these evils. It takes no precautions against a fall in the value of money, because in the whole history of the human race not a single instance can be pointed out of a fall in the value of either or of both of the metals which has not proved a benefaction to mankind; while on the other hand, during every period and whenever a rise in the value of metallic money has occurred, it has been attended by financial, industrial, political, and social disaster. An increasing value of money and falling prices have been and are more fruitful of human misery than war, pestilence, or famine. They have wrought more injustice than all the bad laws which were ever enacted. Under the double standard these evils could never occur, except by a rise in the value of both metals, while under the single standard they might be caused by a rise in the value of one of them.

The statement sometimes made that the two metals never in fact circulate indifferently and concurrently is not true. Notwithstanding the legal relation of value between the two precious metals established in 1792 in this country did not coincide exactly with the market relation, yet they circulated concurrently, with perhaps a preponderance of silver in the circulation until 1821, when the resumption of specie payments in gold by the Bank of England caused an advance in the value of gold and a consequent widening of the relation of value between the two metals. (See papers on the currency appended to the report made in 1830 by Mr. Ingham, Secretary of the Treasury.) Also, after the change made in 1834 in the legal relation of value between the two metals, they circulated concurrently until about 1850, although on account of the undervaluation of silver by the law of 1834, there was a constant tendency to an exportation of silver in the settlement of foreign balances. The draining of a country of its silver coins is necessarily slow, as they are less in value than gold coins, and are consequently diffused among a vastly greater number of holders. It is for this reason that silver has less fluidity of circulation than gold, and presents greater obstacles to its concentration in large masses. The dangers of a financial panic occasioned by sudden and violent outflows of the money of a country are therefore less where the circulation is largely of silver than where it consists wholly or principally of gold.

The legal relation between gold and silver was fixed in France by the law of 1803 at 15½ to 1. This was substantially the market relation throughout the world at that time. After the passage of that law the two metals circulated concurrently in France with the preponderance in the circulation sometimes of gold and sometimes of silver, until recently, when the coinage of silver was interdicted in the mints of Europe and the United States. The coincidence of the market with the legal relation of the two metals during nearly three-quarters of this century cannot be supposed to have been due to steadiness in their relative supply, nor to steadiness in the relative cost of their production, for during this period there had occurred the widest fluctuations in both the cost of production and in the amount produced. It must have been largely due to the French double standard law of 1803 which was a ligature so strong, and which bound the metals so firmly together, at the relation of 15½ to 1, that neither the extraordinarily varying relative supplies of the two metals from the mines of the world, nor the fitful demands of single-standard countries for their particular money metal could force them nearer together or wrench them further apart, except locally, temporarily, and in a trifling and unimportant degree.

If the United States should resume specie payments under the double standard, with the same legal relation of value between the metals as exists in France, there could not be a reasonable doubt that these two great commercial countries would be strong enough to preserve a coincidence between the legal and market relations of the metals, and thereby preserve their concurrent use as money. The United States is now relatively a greater commercial and financial power than was France in 1803, and with greater opportunities for growth and development, and could alone exert a steadying influence on the relation of the metals more powerful than France was able to exert.

Under the double standard the debtor may, at his option, avail himself of money coined out of either metal in the payment of his obligations. This option is of no practical importance, except when a variance between the legal and market relations of the metals becomes sensible. Neither does it work any injustice, nor is it, in fact, confined to one side of any transaction. The creditor is swift to avail himself of it when he lends money, and he never lends in the metal which for the time being happens to be the dearer one. He cannot claim, therefore, that it is his equity to be paid in the dearer metal, and he never is so paid unless, between the dates of lending and of being paid, the double standard is abrogated, so that he is enabled to exact what he did not lend. The debtor may justly complain if he is forced to pay in the dearer metal or money, which he never receives when he borrows. The enormous aggregate of debts in this country, public and private, were contracted by borrowing national paper currency or in the purchase of property at paper-currency prices. It is urged that the debtors ought not to complain if they are forced to pay these debts in specie, and that they ought to have foreseen that the resumption of specie payments in the near future was probable, and that the right of paying in paper currency might be taken away from them. But it cannot be said that they ought also to have foreseen that the option of paying in silver, which had always been theirs, would be taken away and that they would be condemned to pay in gold alone, and not only that, but in gold enormously appreciated in value, if other important double-standard countries should follow our example and make it their sole standard of values.

If it were ordinarily, or even frequently, the case that changes in the relative market value of the metals were caused by a fall in the value of one of them, as compared with all other things, rather than by a rise in the value of the other, it would to some extent tend to strengthen the theory of the advocates of a single standard, that the workings of the double standard are inequitable. But if, on the other hand, it can be shown that the changes which have heretofore occurred in the relative market value of the metals have been invariably occasioned by a rise in the value of one of them, and not by a fall in the value of the other, and if it be probable, if not certain, that so long as the natural operation of the double standard is not interfered with this will be the case hereafter, then the justice of making payments in the most available metal could not be disputed, and the double standard instead of impairing would preserve the equity of contracts.

All the changes that have occurred in the relative value of the metals during the present century, except those which took place after the demonetization of silver by Germany and the United States and the general closure of the mints against it, are clearly traceable to a rise in the value of one of them by reason of an extraordinary demand of single-standard countries for their particular money metal. In no instance can any fall be shown to have taken place in the value of the other, as compared with all other things. In 1821, when the Bank of England resumed specie payments in gold, a change occurred in the relative value of the metals in the London market. Silver fell relatively to gold, but there was at that time no decrease in the demand of the world for silver, which was still accepted as money everywhere except in England. No change had then recently taken place in the relative production of the metals, nor had England any silver with which to frighten or affect the market. The supply of and the demand for silver was unchanged at that period. It is clear, therefore, that in that instance the change in the relative value of the metals in the London market was not due to a fall in silver but arose wholly from the new demand for gold and from a rise in its value.

When in 1859 such a change occurred in the relative value of the metals in the London market as to carry up the London quotation of standard silver to $62\frac{1}{16}$ *d.* per ounce in gold, no recent change had then taken place in the relative production of the two metals to cause a change in their relative market value. Gold had been produced in unusual quantities since 1848, but the effect until 1859 had been merely to produce a gradual and not very great fall in the value of the two metals combined as compared with other things but not in their relative value. The demand for gold was as strong and steady as it had previously been. The commerce of gold-using countries was as active as ever, and the gold prices of commodities underwent no marked change during that year. But, on the other hand, there was an unprecedented demand for silver in England for export to Asia. In that single year the silver export from Great Britain to the East was £14,828,521, or over $70,000,000, which was double the amount of the then annual silver product of the entire world. The unprecedented price of silver in London in 1859 was therefore manifestly due to the extraordinary demand for it in that market, and not to a fall in the value of gold as compared with the value of all other things which it is the function of money to measure.

In respect to the disturbance in the relative market value of the metals which followed the German demonetization of silver, it could be shown from a comparison of prices in silver in 1873 and 1877 that that metal has more than maintained its purchasing power over everything except gold. In 1873, 60 *d.* in gold would purchase an ounce of standard silver in London. In 1877 it only requires 54 *d.* to buy the same amount. It is within the knowledge of all that 54 *d.* will now buy, in England, or in any other country, more real estate, more labor, and more of the general commodities which the world deals in, except silver, than 60 *d.* would in 1873. The exchangeable value of an ounce of standard silver is therefore greater than it was four years ago. While the general purchasing power of silver has thus been maintained it would be an inexcusable blunder to deprive it of its debt-paying power, and of its power, as money, to check the fall in prices which is now striking as with a palsy the limbs of commerce and industry.

It is of the highest importance that the relations of value between money and all other things should be preserved with as little disturbance as possible. All experience shows that this important end can be more nearly attained under a money system based on both metals, and through the use of the cheaper metal whenever a change occurs in their relative value. The industrial and economical world find their principal occupation in the production and distribution of those things which are necessary for human wants, and which minister to human comfort and happiness. They are not engaged in juggling with different kinds of money or in exchanging coins for the small premium which it may be possible to obtain occasionally for the one over the other. Under normal conditions, these premiums are but insignificant, and if it be true that the changes in the relative market value of the metals, which make any premium possible, are local and temporary, and are caused by a rise in the value of one of them and not by a fall in the value of the other, then they are changes which do not affect injuriously double-standard countries. It is the single-standard countries which suffer the evils of falling prices caused by an enhanced value of their money, while it is the double-standard countries which enjoy the benefits of the use of a money which is the better because the steadier in value. It is the single-standard countries whose money metal is temporarily the dearer which pay these premiums, and it is the double-standard countries which receive them. Thus, after 1821, this country sold gold to England at a premium of from 5 to 8 per cent. In more recent times France sold silver to India at a large profit, and at the present time the Germans are paying a heavy premium on gold, which is inaccurately described as the sale of silver at a discount. This premium on gold is for them a loss without any compensation, and so far as they have proceeded in the policy of establishing a gold standard, it has proved an unmitigated injury to the commercial and industrial interests of the world and especially of Germany.

The small aberrations which may occur in the relative value of the two metals, are of no importance in comparison with the overwhelming ruin which would attend such a fall in prices as would be caused by discarding one of the metals. The trifling disturbance in commercial transactions which may result from an occasional petty brokerage in the exchange of the metals, justifies no such violent measure as the demonetization of either of them. Such a remedy would be absurdly disproportionate to the evil, and would be much worse than the disease. The great interest which the world has in the general steadiness of the value of money as compared with property and services, should not be sacrificed in order to escape a theoretical and fanciful inconvenience.

But even if, through the monetary legislation of important countries, or from any other cause, the value of one of the metals should fall, not only relatively to the other, but in its relation to other things, such fall could only manifest itself in a rise of general prices. It will be reassuring to remember that no fall in the value of metallic money nor a resulting rise in prices have ever proved other than a blessing to the world.

The first instance of the establishment of a single gold standard was that in England, in 1816, under the administration of the second Lord Liverpool. This policy, as may be assumed, was adopted in furtherance of the views put forth in the celebrated letter on the coinage (1805) of the first Lord Liverpool to the King. In that letter, no better nor more plausible argument was presented in favor of the adoption of an exclusive gold standard than this one, that alternate changes from silver to gold and from gold to silver, in the actual circulation, resulting from fluctuations in the relative value of those metals, were a "*great detriment to the public.*" Lord Liverpool did not point out the nature of the "*detriment*" caused by such changes, nor has it ever been pointed out by any of the advocates of a single-standard. Even if it be admitted that such fluctuations in the relative value of the metals may occasionally occur in the future, as they have in the past, and that first one and then the other will, at intervals, preponderate in the channels of circulation, as it has not been shown that they have caused any substantial injury or even inconvenience in the past, it is not probable that they will cause any in the future. The general public would be subjected to neither inconvenience nor loss in such changes. The smaller coins used in retail transactions will always necessarily be silver coins. In the larger transactions representative paper, based on both of the metals, would, on account of its greater convenience, be universally used in specie-paying countries. The inconvenience arising from a gradual displacement in the reserves of banks and of public treasuries, of one metal by the other, would scarcely be noticed by the managers of those repositories, and would not be felt at all elsewhere.

II.

THE EMPLOYMENT OF BOTH GOLD AND SILVER AS MONEY HAVING BEEN HERETOFORE REGARDED AS DESIRABLE, HAVE NEW CIRCUMSTANCES ARISEN TO MAKE IT OTHERWISE AT THE PRESENT TIME?

Under this head it will be sufficient to discuss the more limited question, whether new circumstances have arisen to make it expedient to discard silver, as the discarding of the other metal is not proposed. Some reasons for and against discarding either apply equally to both. But others apply only to silver; and still others apply to that particular metal with peculiar force.

It might be expedient, or even necessary, to abandon the double standard if, *first*, the combined production of both had increased and was increasing to such a degree, in comparison with augmenting needs for money, as to threaten their serious depreciation, and such an increase of the prices of commodities as would derange commerce and subvert the justice of contracts; or if, *second*, it could be demonstrated that fluctuations in the relative supply of gold and silver produced immediate effects upon their relative value, and that silver was being produced in such abnormal excess, and gold in such abnormal deficiency, considering the demands for both metals respectively, as to threaten such a continuing and indefinite widening of the relation of value between them as would render necessary frequent changes in their legal relation; or if, *third*, there were such changes in the habits of mankind, or in the amounts of money used, as to render silver, by reason of its weight and bulk, less fit to be employed as money than formerly.

INCREASED YIELD OF GOLD AND SILVER SINCE 1848.

The first supposed case, of a depreciation in the value of gold and silver by reason of their excessive production, involves a wide range of discussion. It is proposed specially to consider the increase of the production and stock of the precious metals since the California discoveries, the effect of that increase on prices and productive industry, and the necessity of a continuing increase to meet the demands of the increasing population and commerce of the world.

The gold yield of Australia and California was at its maximum in the five years ending with 1856. The aggregate production of both metals was also at its maximum during the same period. Since then the combined annual production of the two metals, instead of augmenting, has diminished. The annual production of silver has increased, but that increase has been more than counterbalanced by the annual decrease in the yield of gold. Since 1848 the great bulk of new gold has been yielded by our Pacific States and by Australia, and nearly all of it from alluvial washings, which are yielding less year by year. It is not controverted that all the probabilities are that the auriferous production of both regions will continue to fall off, although perhaps slowly. It is true that new sources of supply may be discovered, but it is improbable that new sources equally prolific will ever be discovered, and it is only barely possible that they will be discovered and made available within any near period. It has been said that, "unlike agriculture, there is but one crop in a mine;" and it may also be said that the greater the number of mines and gold-fields worked out, the less chances there are of finding new ones. Discoveries are hoped for in Africa, on the Amazon, and in the Guianas; but in all those regions the development of new mines, if, happily, they should be discovered, would be retarded by tropical heats and diseases, by the barbarous character of the populations, and by the lack of stable governments and consequently of efficient protection of life and property. In California and Australia there were discovered almost simultaneously the richest and most extensive gold-fields of which there is any record. Their development was directed by the genius and prosecuted with the energy of the foremost races of the world, who were favored by all the advantages of free and stable governments, well-administered laws, unlimited access to capital, healthy and invigorating climates, together with facilities for attracting great supplies of labor. Such a combination of circumstances, never before known, may never occur again; and, as it is now certain that the California and Australian production of gold has distinctly passed the culminating point, all sound reasoning admonishes mankind to prepare for a steadily-decreasing yield of that metal. And it is never to be forgotten that in view of the rapid increase of the population, commerce, and money-wants of the world, a stationary supply of the money metals would have all the paralyzing effects which a diminishing supply would have, if population, commerce, and money-wants remained stationary. The steadiness of general prices can only be maintained when money and population increase in equal relative proportions. General prosperity and a general fall in prices never did and never can co-exist.

ORIGIN OF THE SCHEME OF DEMONETIZATION.

The scheme of demonetizing one of the metals throughout the western world originated soon after the discovery of gold in California and Australia, at a time when the yield was at what has since proved to have been its maximum, but which was then expected by many to continue on an ascending scale for an indefinite period. An eminent English writer (De Quincey) published at that time an elaborate collation of current accounts, from which he arrived at the conclusion that the annual outturn of gold would soon reach seventy millions sterling, or $350,000,000. On the basis of such expectations, the governments of Europe were invoked by Chevalier and others to prevent the anticipated depreciation in the value of money, or, in other words, the anticipated rise in general prices, by the demonetization, not of silver, but of gold.

Chevalier (Fall of Gold, 1856–'57) said:

> The quantity of gold annually thrown on the general market approaches, in round numbers, a milliard of francs, ($200,000,000.)
>
> Those two countries (California and Australia) must, for yet a long series of years, produce gold in such quantities and on such conditions as to render a marked decline in its value inevitable.

> It is absolutely certain that so vast a production should be accompanied with a great reduction in value.
>
> In no direction can a new outlet be seen sufficiently large to absorb the extraordinary production of gold which we are now witnessing, so as to prevent a fall in its value.
>
> Unless, then, we possess a very robust faith in the immobility of human affairs, we must regard the fall in the value of gold as an event for which we should prepare without loss of time.

Under these appeals of Chevalier and others, several nations in Europe, notably Germany and Austria in 1857, demonetized gold. It is probable that the movement in that direction would have become universal in Europe but for the resistance of France. It was changed, at least as early as 1865, into a movement for the demonetization of silver. In the convention of 1865, in which the Latin union was formed, Belgium, Italy and Switzerland insisted strenuously upon the adoption of the gold standard, but were overruled by France. But this change, from demonetizing gold to demonetizing silver, was more of form than of substance. The object aimed at by both was through a disuse of one of the money metals to protect the creditor classes and those having fixed incomes against a fall in the value of money and a rise in general prices. This is the pith and marrow of the monetary discussions of the last twenty-five years.

In the official *résumé* of the doings of the French monetary commission of 1869, the arguments upon both sides were summed up.

In behalf of the gold standard it was said:

> The rise in price which has taken place within twenty years in a great number of articles of merchandise is evidently due to many causes, such as war, bad harvests and increase in consumption; but it is very probable that the depreciation of the precious metals has contributed to it, since there has been a striking coincidence between the rise of prices and the production of the new mines of gold and silver. The annual production of the two metals, which was only $80,000,000 in 1847, exceeds now $200,000,000. It has nearly tripled, and it is easy to see that the real value of the metals has diminished. It is difficult to estimate exactly what the diminution is; but, whatever it may be, it demands the attention of governments, because it affects unfavorably all that portion of the population whose income, remaining nominally the same, undergoes a yearly diminution of purchasing-power. As governments control the weight and standard of money, they ought, so far as possible, to assure its value. And as it is admitted that the tendency of the metals is to depreciate, this tendency should be arrested by demonetizing one of them.

In behalf of the double standard it was replied as follows:

> Many economists argue that the precious metals, having become very abundant, have lost 10 or 15 per cent. of their value, and that the situation must be redressed by making money scarcer by demonetizing silver. To this it may be answered that the great discoveries of gold of the last twenty years have injured nobody. The new mass of gold, spreading over the whole world, has found employment in stimulating all forms of business, and, as a consequence, the value of gold has fallen very little. According to Mr. Newmarch, the mass of gold and silver has augmented 3 per cent. per annum, while the mass of exchanges has augmented more than 3 per cent. per annum, so that the equilibrium has been maintained. And the present is an especially inopportune time to demonetize silver, because the annual production of gold has been falling off for several years. It was $200,000,000 in 1853, and it is now not more than $140,000,000. What will happen to the civilized world if silver is demonetized and if gold shall then fail?

The Dutch monetary commission of 1873, adopting the views of the advocates of a gold standard, maintained that the value of money had been depreciated by an excessive gold production since 1848, and that, as a great gold production still continued, a rise in the value of gold would not occur, even if a greater share of the monetary function was devolved upon it, by demonetizing silver. Their language was:

> In consequence of the very great production of gold, it is not probable, even if gold is more employed as money than heretofore, that we shall see the fall in the value of the precious metals, which we have witnessed for twenty-five years, followed as to gold by any permanent rise.

In all the European discussions, after 1848 and prior to the German demonetization of silver and its consequences, the point made was not that either metal had depreciated relatively to the other, but that by reason of extraordinary supplies of gold from California and Australia, supplemented, about 1865, by new supplies of silver from Nevada, both metals had depreciated relatively to labor and commodities, and that those having fixed incomes were being injured by a rise in prices. So long as the double standard existed, a new supply of either metal was only an addition to and only affected the value of the general mass of money and not the relative value of the metals.

The "fall in gold," which Chevalier lamented in 1857, was its fall in relation to property. He pointed out how the double standard had prevented any change from occurring in its relation to silver, and how it would continue to do so until the silver of double-standard countries was exhausted. In order, therefore, to protect the interests of the income classes, it was claimed to be necessary to demonetize one of the metals, and gold being the metal which then promised the most abundant yield was selected for the purpose.

It was the depreciation in the value of the precious metals and of money, supposed to have already resulted from the new supplies of gold, which made him the conspicuous advocate of the demand that one of the metals should be demonetized in order to "*redress the situation.*"

In the conference of 1865, which resulted in the formation of the Latin Union, Belgium, Italy, and Switzerland, in insisting upon the demonetization of silver, were not influenced by either its actual or anticipated depreciation relatively to gold. The annual silver production of the United States was then only eleven million dollars. In 1871, when Germany decreed the demonetization of silver, the relative value of gold and silver was steady and unchanged and no change was apprehended. As Germany then had the single standard of silver, changes in the relative value of gold and silver in the London market, unless very large, could have been of but little importance to that empire. It was not a fall in the value of gold relatively to silver which caused Germany to demonetize gold in 1857, neither was it a fall in the value of silver relatively to gold which induced that empire to demonetize silver in 1871. In both cases Germany was governed by one and the same apprehension, that the mass of money, or of the precious metals combined, was undergoing a depreciation, and that the adoption of a single standard was needed to "*redress the situation.*" And it is apparent that it was quite indifferent to Germany which metal was selected for the standard.

The change of movement, from demonetizing gold to demonetizing silver, resulted from two causes. The first and principal one was the discovery that the immobility and tenacity of the English character made a European union upon a single metal other than gold impossible. The second was the discovery of the Nevada silver mines.

In 1861 the Washoe region, or Comstock lode, began to attract attention. In 1863, three thousand silver-mining companies had been organized in San Francisco, with a nominal capital of $1,000,000,000, and with thirty thousand stockholders. European interest was so much excited that the French Emperor sent a special commission to examine these mines. The ideas largely prevalent in 1868 may be found in a report of Ross Browne, an official agent of this Government, which was extensively circulated, under the title of "Resources of the Pacific Slope." Mr. Browne said, in that report:

> They [the precious metals] are now increasing more rapidly than is the demand for them, and, at the present rate of increase, they would soon have to fall perceptibly;

but the production will become much greater than it is. * * * If all the argentiferous lodes of Mexico, Peru, and Bolivia, known to be rich, were worked with the machinery used at Washoe, their yield would really flood the world. * * * New deposits of silver will be found, and innumerable rich lodes on the Pacific Slope of the United States, not yet opened, will be worked with profit.

These sanguine expectations in respect to the yield of silver, like the previous expectations in respect to the yield of gold, have been baffled by the event; but they were sincerely entertained, and were largely instrumental in alarming the moneyed capitalists of the world and inducing them to exert their power and influence with various governments in the direction of demonetizing silver. Their fear now was, not that the increased yield of silver would depreciate that metal relatively to gold, but that it would produce a fall in the value of money, consisting of both metals, as the yield of gold had previously done, and cause a rise of general prices, to the prejudice of the income and creditor classes.

EXAGGERATIONS OF THE SILVER YIELD.

What we are now witnessing, and have witnessed since 1856, is a decrease in the annual yield of gold, exceeding in amount the annual increase in the yield of silver. All the probabilities point to a continuance of this reduction in the yield of gold in the future. If there is danger of an undue increase of the production of the two metals combined, or if there is any good foundation for the hope that the combined production can be kept up to the point of correspondence with the increasing need of money, it is to be found in a still further increase in the yield of silver, and, for the present, in such increase in this country.

From the conditions surrounding its production, it is not reasonable to suppose that the supply of silver from Mexico, Central America, or South America, will vary much in the future, certainly not in the immediate future, from what it has long been in the past. Their production of silver is now decreasing rather than increasing. The condition of things in all those countries is too stationary in respect of population, capital, skill, and political situation, to justify the expectation of any great increase in their silver product. The United States, is the only highly progressive nation which possesses silver mines of importance. There are none in Europe or in the British colonies, which are known and worked. It is the mines of the United States which have furnished the entire increase of silver which has occurred since 1860, and it is from these mines only, according to all appearances, that this increase can be maintained or carried to still higher figures.

Tabulated statements of the production of silver were submitted to the British parliamentary silver commission of 1876, by Sir Hector Hay, a bullion broker of London, who was referred to by that commission as a very high authority. These tables cover a period of twenty-four years, from 1852 to 1875, both inclusive. They give the annual production of silver outside of America, without any variation from year to year, at £2,000,000, or $10,000,000. This estimate must include the silver extracted from Spanish lead and other argentiferous imported ores in the refineries of England. During the first two-thirds of these twenty-four years, the annual production of Mexico and the countries south of it is put down, without yearly variation, at £6,000,000. But in the last third of these twenty-four years there are some yearly variations, although not great, and the average annual yield is estimated at £5,125,000. In each of the two last reported years, 1874 and 1875, it was £5,000,000. Upon the whole, the production of the world, outside of America, may be taken as small, unimportant, and stationary. In Mexico and the countries south of that republic it is large and important, but in the immediate present decreasing rather than increasing. Undoubtedly capacities for and possibilities of increasing the yield of silver exist there, but where a business like that of silver-mining has been prosecuted steadily and continuously for nearly four centuries, great and sudden changes either in the methods or results of mining may not be expected except under some such remote contingency as the occupation of Mexico by the people of the United States.

In 1800, according to Humboldt, the annual silver-production of Mexico and the countries south of it was £7,071,831. During the period from 1809 to 1829, in consequence of the revolutions against the Spanish government, it fell, according to Jacob, to an annual average of £3,109,000. As has been seen, it subsequently advanced to an annual average of £6,000,000, and stands now at about £5,000,000.

The average annual yield of silver in the United States during the five years ending with 1875 was $23,800,000. As no silver was produced in this country during the five years ending with 1856, it results that the world's average annual yield of silver in the five years ending with 1875, as compared with the five years ending with 1856, increased $23,800,000 in the United States, diminished $4,353,130 in Mexico and the countries south of it, and was stationary elsewhere. Comparing those two periods, the net increase of the world's annual silver-yield was therefore $19,446,870.

More than one-half of the silver-product of the United States is from the Comstock lode. A sudden cessation of the yield of that lode is not to be expected. An average depth of 1,800 feet having been attained, it may be safely presumed that the culminating point of its production has been reached, and that a decrease is probable in the near future. (See minutes on silver-production.) That such is the judgment of the community where these mining-properties are located, and where they are principally held and best known, is shown by the declining market-price of the stocks representing them. The utmost that can be hoped for is that the total supply may be kept up by increased vigor in the working of the lower-grade argentiferous veins which are found so abundantly in the Rocky Mountains and westward to the Sierra Nevada. But, from the slowness which characterizes the development of ordinary silver-mines, it is not probable that their yield will increase as rapidly as the yield of the Comstock lode will diminish.

All that can be safely said on the possible discovery of new and great bonanzas is that the chances are against such discoveries within any near period. More than three centuries elapsed between Potosi and the Comstock lode, and it is a fact of observation, both in respect to silver bonanzas and great gold-fields, that they are separated by great spaces of geographical distance. It certainly cannot be proposed to predicate legislation upon the possible discovery of new gold-fields like those of California and Australia or of new silver-lodes like those of Potosi and the Comstock.

So far as the future of silver-mining in the United States depends upon the increased working of ordinary silver-mines, it is safe to assume a steady advance as capital and labor become more abundant and as the means of access to the regions in which those mines are found are multiplied and improved. But experience has shown that rapidity in such advance is not to be expected. It takes time to inspire capital with confidence in such investments, and the more so because the needed capital must be drawn, to a large extent, from points remote from the localities of the mines. No increase in the yield of silver in the immediate future seems, upon the whole, to be probable, and it is still less probable that there can be such an increase as will compensate for the continuing decrease in the yield of gold. And even if this should be the case, there would be no increase in the aggregate supply of the two metals, which is now scarcely sufficient to meet the money needs of the world's advancing population and to keep the existing stocks good against loss by accident and abrasion and consumption in the arts.

According to the estimates of Tooke and Newmarch, the gold-yield of the world during the first five years of the California and Australian developments, ending with and including 1856, averaged annually £29,176,000, and during the five years ending with and including 1875, £20,308,200, showing an average annual reduction in the latter period of £8,867,000.

According to the estimates of Sir Hector Hay, the gold-yield of the world in the five years ending with 1856 averaged annually £29,935,000, and in the five years ending 1875, £19,640,000, showing the larger reduction of £10,295,000.

The smaller of these two estimates of reduction in the yield of gold is considerably larger than the increase in the yield of silver during the five years ending with 1875, but the silver-yield of the United States is now greater than $23,800,000, which was its annual average during the five years ending with 1875. By so much as it is greater, so much more nearly does the silver-increase offset the gold-decrease. But on no estimate is the offset a complete one.

It thus appears that the aggregate production of the two metals has declined since 1856, and that the probabilities are at least as strong of a future decline as of a future increase. But it has been urged that the yield of the two metals in 1856 was much too great, and that the yield for the last twenty years on a scale somewhat but not much declining has been in excess of the legitimate wants of commerce and increasing populations, and that the continuance of the production on an equal scale would tend to depreciate the value of money and to increase the prices of commodities to an injurious and dangerous extent. If this is true, it would tend to indicate and excuse the demonetization of one of the metals as a measure necessary to protect the interests of creditors.

Undoubtedly the largely-increased out-turn of the two metals for the five years ending with 1856 produced a general increase of prices throughout the commercial world. But no evils resulted from this increase, which, on the contrary, so stimulated productive industry as to be of immense benefit to all classes, including creditors. But whatever resulted, the fact is an accomplished one. The world has accommodated itself to the new range of prices, and to demonetize either metal in order to restore the old range would bring on evils vastly greater than those sought to be remedied. There is no rule of equity or expediency which requires the world to go back to the prices of 1848, which would not require it to go back to the prices before the discovery of America. The vital questions to be decided are, whether the yield of the precious metals has been more than sufficient to maintain the range of prices attained from 1856 to 1865, and whether the present and prospective yield promises to do more than this for the future, and whether it is not more probable that the utmost yield of the two metals combined, which can reasonably be expected, may prove too small for the world's rapidly-growing wants, and cause a fall rather than a rise in general prices.

It is not proposed to enter upon the question still in dispute as to the most accurate mode of calculating an average of prices, but to state the conclusions upon which there is a substantial agreement. These conclusions are—

1. That from the beginning of the revolutionary troubles in South America in 1809 to the opening of the California mines in 1849 there was a continuous rise in the value of money and a corresponding fall in the price of commodities. According to Jevons, money increased in purchasing-power during this period 145 per cent.

2. That after 1849 there occurred a fall in the value of money and a rise in the price of commodities, which reached their maximum about 1865. During this period, according to the same authority, the purchasing-power of money decreased 15 per cent.

3. That this decrease in the purchasing-power of money has since then been quite overcome, and that its command over property is at least as great as it was in 1849, and very much greater than it was in 1809.

These conclusions relative to values and prices refer solely to the relation between money and property, and not to the relation between money and labor.

It is plausibly maintained by many economists that an increasing volume of money has a greater and more immediate effect in increasing the wages of labor than it has in increasing the prices of commodities. One reason given for this is, that an increasing volume of money, while it stimulates industrial enterprises, at the same time furnishes the means to so organize and classify labor as to make it more effective, so that, although there may be a nominal and, so far as the workman is concerned, an actual advance in wages, the real cost of labor to the employer is not increased. It is probable that the main and governing cause for the increased efficiency of labor is to be found in the moral effect which increased wages and steady employment have on the workman. They inspire him with a confident hope of bettering his condition. This hope imparts vigor to his arm and willingness to his mind. It stimulates his mental and especially his inventive faculties. Every period of increasing money has been marked as the most fruitful in the inventions of labor-saving machinery. These inventions, while they cheapen the cost of commodities, increase the demand for them to an extent fully as great, and do not diminish either wages or the demand for labor.

There is a diversity of opinion as to the exact dates at which prices may have risen or fallen and as to the exact extent of such rise or fall; but it is universally conceded that the great increase of the world in commerce, in wealth, and in the population of its civilized portions, following and caused by the California and Australian discoveries, has more than kept pace with the yield of the precious metals since 1865, and that in or about that year, the rise in general prices, caused by these discoveries, was distinctly checked, and that they have since shown a large decline. This decline has been undoubtedly aggravated by the demonetization of silver in several commercial countries.

The suspensions of specie payments in Russia, (in 1857,) in the United States, (in 1862,) and in Italy, (in 1866,) all within twenty years, not only liberated a very large amount of specie, which was exported to specie-paying countries, but cut off the demand of the suspending countries for the supplies of gold and silver which would have been required to keep up their stock of money if it had remained metallic. Were it not for this extraordinary supply and decreased demand, it is more than probable that the specie prices of commodities would now range lower than they did in 1849. It is certain that a resumption of specie payments in all or either of the three countries named would make such a demand for specie as would greatly appreciate its value, and force prices to a much lower level.

The still-continuing suspensions which occurred in the Argentine Confederation, (in 1857,) in Peru and Austria, (in 1868,) and in France (in 1870) also diminished the demand for specie and increased its supply to the specie-paying countries, but in much less measure than the suspensions in Russia, Italy, and the United States.

The increase of the world in population, wealth, and commerce is still continuing. The stock of metallic money will consequently become inadequate if it remains stationary, and still more suddenly and greatly inadequate if it should be reduced by the demonetization of either of the precious metals. The progress of mankind, in the particulars mentioned, has a most important bearing on the question of demonetizing silver. It will require the highest possible production of both metals, if that progress is to continue in the future as great and rapid as it has been in the past. In general, we know that this progress has been very great during recent years, but the statement of certain particulars may give a more exact and just idea of it.

The following is a statement of the aggregate exports and imports of the three leading commercial nations, Great Britain, France, and the United States, during five successive decades, the whole covering the half century ending with and including 1874:

Periods of ten years ending with and including—	Aggregate of imports and exports.
1834	$8,333,656,168
1844	11,501,879,982
1854	17,495,140,919
1864	32,751,773,510
1874	51,915,727,739

In the ten years ending with 1854, although the new supplies of gold affected only the latter part of that period, the increase was more than 50 per cent.

A comparison of the ten years ending with 1874 with the ten years ending with 1854 shows that commerce nearly trebled in those twenty years.

These comparisons show how new uses absorbed the new supplies of gold, so as to prevent an increase of prices. Another mode of stating it may be that the new supplies of gold rendered possible the enlarged operations of commerce. And, doubtless, both modes of statement are necessary to cover all the aspects of the fact.

In the following tables, the advance of each of the three leading commercial nations is separately stated:

GREAT BRITAIN.

Decade ending—	Aggregate of imports and exports.
1834	$4,646,225,000
1844	6,343,900,000
1854	9,893,215,000
1864	18,019,165,000
1874	28,500,555,000

FRANCE.

Decade ending—	Aggregate of imports and exports.
1834	$1,913,000,000
1844	2,741,400,000
1854	4,088,000,000
1864	8,327,200,000
1874	12,728,400,000

UNITED STATES.

Decade ending—	Aggregate of imports and exports.
1834	$1,774,431,168
1844	2,416,579,982
1854	3,543,925,919
1864	6,405,408,519
1874	10,686,772,639

In Italy the public revenue increased from $250,000,000, in 1861, to $550,000,000, in 1873; and the aggregate of imports and exports from $330,000,000, in 1869, to $454,000,000, in 1872.

Without multiplying illustrations, it may be said that commerce has everywhere wonderfully increased under the stimulus of the great supplies of gold from California and Australia. The London Economist of May 11, 1865, said:

> We find here [in Great Britain] our external trade doubled in the last twelve years, and this external trade is, we believe, but a faint representation of the increase of transactions throughout the whole of our domestic industry. But not only has this multiplying process been carried on in those islands; it has prevailed almost as largely in France and has spread all over Germany. It has filled Italy, aroused Spain from its long lethargy, and penetrated even to the remote provinces of Russia. No corner of Europe has remained insensible to the new stir of industry and enterprise. All these facts are indications of the enormous addition which has been made during the last fifteen years to the extent and depth of the channels of circulation required to be filled with metallic money in some form or other. The truth is that with the present and extended commerce of the world far more mischief and inconvenience will arise from the effect of what seems to be a continuous gradual decline in the new supplies of gold than from any effects which have flowed or may flow from the California and Australian discoveries.

Of railroads, which are at once a proof and an instrumentality of commerce, about seven-eighths of all existing lines have been constructed since the discovery of gold in California.

According to Poor's Railroad Manual for 1876–'77, there have been completed in the world to the present time 182,690 miles of railroad. Of this vast mileage, only 24,102 miles were completed in 1850.

The increase of the world's wealth since 1849 admits of no accurate computation. In this country, according to the following estimates from the census-reports, it more than quadrupled in twenty years.

	True value of property in United States.
1850	$7,135,000,000
1860	16,159,000,000
1870	30,068,000.000

In the British Australian colonies, the rate of increase was greater. In Europe it was less, although still great. In the world as a whole, it must certainly have kept pace with the increase of the stocks of the precious metals.

In Great Britain and Ireland the value of property assessed to income-tax, was:

1872	£435,000,000
1848	256,000,000
Increase	179,000,000

It is a striking feature of modern, and especially of recent times, that the area of civilization, with all its attendant conditions, has been immensely extended over substantially unoccupied portions of the earth. The foremost European races have spread rapidly and resistlessly in every direction. Wherever they have planted their feet they have established order, encouraged industry, built up commerce, created wealth, and infused with the commercial idea the sluggish populations by which they were surrounded. It is thus that Europe grows quite as much abroad as at home, and it will be its glory in coming times to be overshadowed by its colonies, which are diffusing its blood, genius, arts, and languages over every continent and over the isles of all the seas. While the former seats of civilization expand in population and power, new and great civilized nations appear upon the scene. The figures which mark the extent of these new creations enlarge so rapidly and so soon become obsolete and useless that it seems a waste of time to charge the memory with them. The annual imports of Australia are now stated at $250,000,000, implying an aggregate foreign commerce of twice that amount, which surpasses that of Great Britain forty years ago, that of France twenty-five years ago, and that of the United States twenty years ago. Canada, the Cape of Good Hope, and other British dependencies attest also the colonizing energy of Great Britain, and, if less strikingly, it is only because of the contrast with the prodigious advancement of Australia. In South America the colonization of other European races, not accompanied as in the British case by extensions of European sovereignty, but equally involving the extension of European civilization, is proceeding upon a great scale. During the year 1875 the European emigration to Buenos Ayres actually exceeded that to New York.

If the business of the world is to be based on metallic money the production of either of the metals would be entirely insufficient. Both gold and silver must still be used as money, and the production of both must continually increase if the advance of the world in wealth, commerce, and population is to continue in an equal ratio as in the recent past. If metallic money becomes insufficient, by reason of the demonetization of either of the precious metals, or from any cause, one of two things must happen—

The commercial, industrial, and numerical progress of mankind must be arrested, and if the decrease of money shall be a continuing one and cover a long period of time it must end in an absolute check to progress and possibly in the destruction of existing social and political institutions.

Or, what is most probable, relief would be sought in an extension and perpetuation of existing systems of inconvertible money, which owe their origin to the pressure of expanding population and commerce against the restrictive bounds of a stationary and perhaps declining aggregate supply of the two metals.

During certain periods in the past, when prices have been falling by reason of a shrinkage in the volume of money, a slow and toilsome advance has been made in the accumulation of wealth. Under such conditions its just distribution is impossible. A shrinking volume of money and falling prices always have had and always must have a tendency to concentrate wealth, to enrich the few, and to impoverish and degrade the many. This tendency is subtle, active, and portentous throughout the world to-day.

FLUCTUATIONS IN THE RELATIVE PRODUCTION OF THE METALS DO NOT AFFECT THEIR RELATIVE VALUE UNDER THE PRESENT CONDITIONS OF THE WORLD'S BUSINESS, SO LONG AS THE LAW OF ONE OR MORE IMPORTANT COUNTRIES PERMITS THE UNRESTRICTED COINAGE OF BOTH METALS, AND INVESTS BOTH EQUALLY WITH THE MONEY FUNCTION.

It is said that changes in the relative value of the two metals are caused by changes in the cost and amount of their relative current production, and that from the very chance nature of mining changes in the cost and amount of production must constantly occur, and that, consequently, such frequent changes must be made in the legal relation of gold and silver as to render the maintenance of the double standard extremely inconvenient.

It has always been a theoretical objection to the double or optional standard that the market-relation of value of gold and silver might so diverge from the legal relation as to render a re-adjustment of the latter occasionally necessary. We have had but one re-adjustment since 1792 in our own coinage, namely, in 1834. The change of 1837 in the legal relation was too minute and trifling to be called a re-adjustment. The re-adjustment of 1834 was not made necessary by any change which had taken place in the market-relation of gold and silver, but because the legal relation originally established in 1792 did not accord with the market-relation at that time. If the proper relation had been established in 1792, it is doubtful if a re-adjustment would have been required down to the present time. In the debates in the French Chambers upon the law of 1803, fixing 15½ to 1 as the legal relation between gold and silver, it was conceded that changes in that relation might be required at probable intervals of half a century; but none has, in fact, been made in France since then, nor until recently have any even seemed to be necessary.

The relative value of the two metals, which had fluctuated considerably during the Middle Ages, settled and became steady about the middle of the seventeenth century. Whether because the great opposing forces of the American supply of, and the Asiatic demand for, silver had then reached the final adjustment of their effects, or whatever may have been the cause, the fact is certain that from that time on, and for more than two centuries, and down to 1874–'75, when the German demonetization of silver began to come into practical operation, the fluctuations were slight and unimportant, except during a short period, when England disturbed the markets by adopting a gold standard.

In the appendix to this report will be found *Minute on the Market Ratio Between Gold and Silver in London, England, from* 1760 *to the Present Time.* The ratios between gold and silver between 1833 and 1875 are taken from the tables furnished by Pixley & Abell, bullion-brokers, of

London, to the British Silver Commission of 1876. The ratio each year from 1833 to 1875 is based on the average price in gold in each month of the year of one ounce of standard silver. When the London quotation is fifty-nine pence per standard ounce, the relative value of silver and gold in that market is 15.98 to 1. This is the legal relation that was established in this country in 1834–'37, and which remained unchanged until it was abrogated by the demonetization of silver in 1874. When the London quotation is 60.87 pence per ounce, the relative value of silver and gold in that market is 15½ to 1, which exactly corresponds with the legal relation between the metals in the Latin Union.

A comparison of the fluctuations in the relative value of the two metals with the fluctuations during the same periods in their relative production, will show how small an influence the latter have had upon the former.

The period from 1833 to 1875 covers twenty-seven years after the California discoveries and twenty-four years after the Australian discoveries. There was an enormous increase after 1848 in the relative annual production of gold, and this increase had in 1873 continued long enough to affect very greatly the relative magnitude of the stocks of the two metals.

From the date of the discovery of America until 1848, Chevalier estimates the production of gold and silver respectively as follows:

	Silver.	Gold.
From America	$5,261,000,000	$1,998,000,000
From elsewhere	444,000,000	628,000,000
Total	5,705,000,000	2,626,000,000

The gold supply was 31 per cent. of the whole.

Also see appendix, *Minute on the Production of Gold and Silver in the Western World from the Discovery of America to the Present Time.*

The annual production at the beginning of this century was, according to Humboldt—

	Silver.	Gold.
From America	£7,071,831	£2,382,315
From elsewhere	661,145	251,822
Total	7,732,976	2,634,137

The gold supply was then 25 per cent. of the whole.

During the twenty years from 1809 to 1829, when the American supply was seriously reduced by revolutionary troubles in the Spanish colonies, the annual average production of the world was, according to Jacob, in gold, £1,598,000, and in silver, £3,639,000. This made the annual gold supply during that period 30 per cent. of the whole.

In 1846, in consequence of a heavy yield from the Russian gold-fields, the supply of gold was from 50 to 52 per cent. of the whole, but so large a proportion of gold had been produced only for a short period prior to 1848. According to all estimates the supply of gold for three centuries and a half prior to 1848 was only some proportion between 25 and 31 per cent. of the total supply of the two metals.

According to the figures of Sir Hector Hay, heretofore given, and which do not materially differ from those of Tooke and Newmarch, and other accepted authorities, the proportion of gold production to the combined production of gold and silver was—

In five years ending with and including—	Proportion of gold to supply of both metals.
1856	79 per cent.
1861	75 per cent.
1866	71 per cent.
1871	71 per cent.

And even during the four years ending with and including 1875, the Comstock lode had only carried up the relative production of silver to a proportion of about 40 per cent. of the supply of both metals.

During the entire twenty years ending with and including 1871, the proportion of silver was only about 27 per cent. of the whole production, whereas for three and a half centuries prior to 1848 it was from 69 to 75 per cent. of the whole production. Even in 1876, the yield of silver was only 43 per cent. of the whole production.

These facts show how great a change the gold discoveries of the middle of this century made in the relative out-turn of the two metals.

How trifling were the changes in the relative value of the two metals during this enormous change in their relative production will appear from the minute on the market ratio of gold and silver.

The London quotation of the price of silver in 1871 was 60$\frac{1}{2}$*d.* per standard oz. During none of the five years ending with and including 1871 did it exceed 60$\frac{9}{16}$*d.*, and the average during the whole five years was 60$\frac{41}{80}$*d.* During the five years preceding 1848 it averaged 59$\frac{31}{80}$*d.* The utmost that can be set down to the score of the California and Australian gold yield as a disturbing cause is this difference between 60$\frac{41}{80}$*d.* and 59$\frac{31}{80}$*d.* There were intermediate differences somewhat larger, but the greatest, that of 62$\frac{1}{16}$*d.* for the year 1859, was clearly due to the sudden and largely increased demand for, and purchase of, silver in England to remit to India to construct railroads and other public works, the necessity for which had been made apparent in the great Sepoy rebellion. It is, at any rate, a pregnant coincidence that the greatest aberration in the London market in the relation between gold and silver, prior to the German demonetization, was contemporaneous with an extraordinary demand for silver for India, for uses till then unknown in that country. It is doubtful whether any of these changes in the relative value of the metals should be ascribed to changes in their relative production. They were practically confined to the London market and measured the varying premiums which England was obliged to pay for the luxury of a gold standard. The silver needed for its great dependency could have been obtained without premium or inconvenience if the metals had been legally interchangeable, as in France. It has never been shown that the maximum change in the relation which occurred in 1859 was a source of loss, or even inconvenience, to double-standard countries. On the contrary, the French Baron Rothschild says that France has profited largely from the premiums which England has been compelled to pay for silver from time to time.

Ernest Seyd (Bullion, page 631) ascribes the occasional higher prices of silver in London to the demands for the eastern trade, and adds that "on the continent silver has varied but little in price." Sir Isaac Newton, in 1717, treated much larger fluctuations in London, arising from the same cause, as of no importance. In his report, then made as master of the mint, he determined the average price of silver in London to be 64$\frac{1}{2}$ pence, and adds:

When ships are lading for the East Indies, the demand of silver for exportation raises the price to 66 or 68 pence, or above, but I consider not those extraordinary cases.

The sudden increase of the demand for silver in England in 1859, is shown by the fact that British silver exports to the East rose from £4,753,933 in 1858 to more than three times that amount in 1859.

The steadiness in the relative market-value of the two metals under a sudden and great increase of the supply and stock of gold having been thus demonstrated by experience, it is incredible that it can have been at all affected by the smaller and slower increase of the last few years in the supply and stock of silver. For a long period of time prior to 1848, silver had been produced greatly in excess of gold, and is not now produced equally with it, and is not likely to be so produced for many years. The most that can be said is, that the yield of silver has recently recovered from a temporary relative deficiency. Its present increased yield, as has been shown, is principally from the Comstock lode. Even if an excessive relative production of either metal would tend to disturb the relative value of the metals, the production of the Comstock lode, which yields almost as much gold as silver, could not occasion such a disturbance.

The results following the extraordinary supply of gold from California and Australia, as well as those which followed the extraordinary supply of silver after the discovery of America, show that the steadiness of the relative value of the metals, under great vicissitudes of production, is sufficiently great to justify their concurrent use as money, and is very much greater than the steadiness in the value of either or both of them, as compared with all other things.

One cause for the steadiness in the relative value of gold and silver is perhaps to be found in the hypothesis that during the past three centuries, when the variations in their relative market value have oscillated between 14 and 16 of silver to 1 of gold, the variations in the relative cost of producing them have also been between 14 and 16 to 1, taking into account all the varying conditions of production. But while there seems to be a not very unsteady relation of value between the metals, independent of legislation, whether based upon cost of production over long terms of time, as assumed in the foregoing hypothesis, or upon the relative magnitude of the accumulated stocks of gold and silver, or uponsome other foundation, it also appears to be established by experience that law can make the relation exact and permanent, within the range of fluctuations determined by other causes. A law undervaluing any particular commodity, whose current production rarely exceeds its current consumption, would be speedily defeated by a stoppage of its production and the disappearance of the article undervalued. The enormous stocks of the precious metals, the accumulations of centuries, and imperishable, so greatly exceed in amount either the production or consumption of any one year, or of scores of years, that the law can control their relative value in the performance of the money function which it confers on them. It is the enormous surplus of the precious metals over and above the demand for them as commodities which places it within the power of the law to control their relative values, and the larger this surplus is the more exactly and permanently can the law control them. The view seems extreme and untenable that this power of the law is without limit, as, for instance, that it could permanently make silver and gold equal in value pound for pound. At that rating, gold would be produced only under exceptional circumstances, and the gold in existence would rapidly leave the coinages for the other uses, to which it is essential, or pre-eminently adapted.

Whenever the surplus stock of the under-valued metal should disappear, the power of the law to control its value relative to the other metal would cease. The demand for it in the arts would be superior to the demand for it as money, and would absorb the current production at higher than mint rates. But whatever doubt may exist as to the possibility of establishing an equivalency between the metals of one for one, or any other extraordinary equivalency, there can be no doubt that the United States alone could by law establish exactly and permanently an equivalency between them, which has practically withstood the mutations and frictions of three centuries of time.

The use of the precious metals as money is as old as tradition, and there can be no doubt that this use originated in the universal estimation in which these beautiful metals had always been held and in the qualities of durability, divisibility, and portability which fit them for the monetary function. Nor can there be any doubt that originally the value of gold and silver followed closely the cost of their production, and that the demand for them as commodities was the controlling, but variable, force in regulating their values. But when in the progress of society large stocks of the metals had been accumulated and their use as money had become established, that use and the demand which resulted from it became the controlling force in regulating their values. Demand and supply are the sole factors out of which exchangeable value arises. The demand for gold and silver as commodities is limited and fluctuating, but when the law invests them with the higher function of money and makes them the common denominator of all values, that limited and fluctuating demand is changed to an unlimited and constant one, which fixes their value for other and inferior purposes.

The demand for the precious metals as commodities is believed by many to be still essential to their general and ready acceptance as money. If this is true, it is a misfortune. The happiness and prosperity of the world, if not wholly dependent upon, are largely influenced by, the steadiness of the value of money, which cannot exist without steadiness in its volume. The demand for the precious metals as commodities is fitful and irregular, and always affects the volume of money in the most injurious direction, that of decreasing it. History shows that a deficiency of money is more probable and more to be feared than an excess, and this deficiency is caused in a great measure by the insidious and constant encroachment upon the precious metals of other demands for them than as money. When the magnitude of the world's interests and equities, which rest on steadiness in the value of money, is contrasted with the comparative unimportance of the uses of the metals as commodities, it becomes apparent that the subjection of the value of money to disturbance from the demands for gilded signs and looking-glasses, for bangles and breast-pins, is an evil which the benefits derived from such uses but poorly compensate.

The power of law in steadying the relative value of the metals has been signally illustrated during the extraordinary variations of the last thirty years in their relative supply. To whatever extent gold depreciated in relation to commodities from 1848 to 1865, after the California discoveries, silver depreciated to the same extent, notwithstanding the enormous decrease in its relative production during that period. The two metals fell together because the ligature of law was strong enough to hold them together. The French law of 1803 held their relations steady in Europe until it was practically abrogated by the limitation of silver coinage in 1874, and its total suspension in 1876. Jevons likens the stocks of the two metals to two reservoirs, supplied from independent sources, and, therefore, tending to differences of level, but actually kept at the same level by a connecting-pipe. The connecting-pipe between the metals is the law, which establishes a legal relation of value between them, and which, by authorizing their interchangeable use as money, maintains their market and legal relation of value at the same level.

It is not claimed that law can directly control the relative values of the metals, or of anything else. But it is claimed that upon the slightest divergence between the two metals, the law of the double standard creates a new and constant demand for the cheaper metal, while at the same time it suspends all demand for the dearer one, and, until the equivalency is restored, furnishes a supply of the dearer metal to the markets of the world. It thus operates on demand and supply, which, it is not denied, are the sole factors of value.

The power of a country whose laws establish the double standard to steady the relative value of the metals in the markets of the world depends, first, upon the aggregate amount of its metallic circulation, and, second, upon the proportions of each metal in that supply. A country with a metallic circulation of, say, $150,000,000 in gold and $250,000,000 in silver, has the power to furnish to the world's markets those amounts respectively of both gold and silver, and to take in corresponding amounts of the other metals. Under these conditions it could to that extent check fluctuations in either direction and from whatever cause arising in the relative value of the metals. But if the metallic money of a country were $400,000,000, wholly in silver or gold, it could only prevent a rise in the relative value of the particular metal which it possessed, which it could do by yielding up to the markets the whole of that metal and absorbing in its place an equal amount of the other. Thus France, during the period of the greatest gold yield, absorbed under the free operation of the double standard not less than $500,000,000 and probably $700,000,000 in gold in eight years and yielded up a sufficient amount of silver to maintain the equivalency between the metals.

The metallic circulation of Great Britain is generally estimated at $600,000,000, and of France at $1,000,000,000. On a comparison with any country on a metallic basis, $500,000,000 is the least amount of metallic money that can be assumed to be sufficient for this country in the event of resumption. With that amount divided between gold and silver in any proportion which can be conceived to be probable, the power of the United States would be sufficient to maintain the equivalency of the metals against greater fluctuations in the supply and demand than have ever occurred in the direction of depreciating silver, or are ever likely to occur in either direction.

It has not been deemed necessary, in view of the patent and accumulated facts of experience, to present all the technical and theoretical arguments and subtle considerations which sustain the theory that supply and demand, as commonly understood, have only a minor influence upon the value of a vast surplus of any commodity which the law invests with the functions of money, and that law is the major and paramount influence, not in controlling the value of money in relation to other things, but in creating an automatically-shifting demand and regulating through it the relation of value between the surplus stocks of two commodities invested with the functions of money.

The first treaty concerning a relation of value between the two metals was made between France, Italy, Switzerland, and Belgium, in 1865, and known as the Latin Union. This treaty made permanent in those countries, until 1880, the relation which had previously existed in each of them of 15½ of silver to 1 of gold. The advantages of an agreement between double-standard countries, upon the relation of value between gold and silver, seem obvious at the present day. In all times past, the relation has been established not by concerted action, but by each nation acting for itself, with the apparent design of securing some supposed advantage in matters of commerce and money. It was long supposed that there was something to be gained by retaining the one metal rather than the other, and that the threatened exportation of the favored metal ought to be prevented by its legal overvaluation in relation to the other metal. Even the great mind of Sir Isaac Newton did not wholly escape the influence of the prevailing delusions of his time, and his report of 1717 upon the relation of the metals is mainly directed to a demonstration of the relation most likely to prevent the exportation of silver. Our own legislation on this subject has not been faultless. The legal relation of gold to silver of 1 to 15, originally established in 1792, was an undervaluation of gold and an overvaluation of silver. The change made in 1834, establishing a relation of 1 to 16, was as great an error in the opposite direction, but was acceptable to Georgia and the Carolinas, then in the flush of great hopes from recently-discovered gold-mines, and satisfactory to the whole country on the theory that bank-notes could be expelled more certainly and readily from the smaller channels of circulation by gold than by silver coin.

With the more enlarged ideas now prevailing in respect to international interests and obligations, it may be reasonably hoped that the nations which agree upon the wisdom and policy of a double standard of money will guarantee to that policy its best development, by a uniform relation of value between the metals.

The closure of the mints of Europe and the United States against the unrestricted coinage of silver reduces the current supply and uncoined stock of that metal to the level of a commodity in those countries, deprives it of the steadying influence of a connection with the vast accumulations of coined silver, and dams it from the channels of circulation, to take its chances of finding purchasers in the markets. A surplus of silver in the London market of even so small an amount as $10,000,000 might cause a serious depreciation in its value. The extent to which any commodity not in present demand can be held speculatively in the market, depends upon the number of persons who possess the capital to hold it, and at the same time the confidence and temper to induce them to do so. Ten million dollars in silver is a large and onerous amount to be carried speculatively, with the loss of interest and other charges, even in the London market, but it is a wholly insignificant sum in the circulation of even one considerable country. The much larger sum placed on the markets by the German demonetization of silver, would not have been felt if France had not adopted the policy, without precedent in history, of closing its mints to a metal which it still retained as money in the coins alreadys truck from it.

The present fluctuations in the relative value of the precious metal could not have occurred with open mints for both metals, and instead of being arguments against the double standard, most strikingly illustrate the folly of abandoning it and of closing mints against silver. How much suffering and loss must yet be endured, before the commercial world returns to the old and safe ways, remains to be seen.

The policy of France in closing its mints to silver can hardly be explained as the result of panic. It was probably brought about by the activity and influence of the partisans of a gold standard. A vastly greater excess of gold had been brought to the French mint after the California and Australian discoveries, than could have been brought to it in silver in consequence of the German movement. There is not, and has not been since 1873, any question of the power of France, and its monetary allies in Europe, to sustain silver and the double standard. England and Germany are important countries, but they are not important enough, with a current annual production of $101,000,000 in gold, and only $74,000,000 in silver, to raise gold and depress silver, if France again resumes silver coinage. Either France or the United States could resume the coinage of silver without suffering anything more or worse than the exchange of their commodities or possibly some small amount of gold for silver. If they or either of them refuse to do so, it will not be from expediency or necessity, but because their ancient opinions have been changed for the new dogmas which originated in the ncrease of metallic supplies after 1848.

WEIGHT AND BULKINESS OF SILVER.

The inconvenience and expense of transporting and handling sums in silver sufficiently large to meet the requirements of the increased exchanges of modern commerce, is sometimes urged as a reason for the abandonment of the heavier and bulkier metal. To this it is a sufficient answer that the facilities for transportation have increased as rapidly and as greatly as the volume of commercial exchanges, and even more. In the transportation of the precious metals, the chief cost is the risk, and is therefore proportioned to the value, and not to the bulk and weight, which have become comparatively unimportant considerations. If the weight of a given value in silver is greater than the same value in gold, the risk in its carriage is less, because it is less liable to furtive seizure and concealment. As a matter of fact, the charges for transportation are about as low for one metal as for the other. So far as convenience of handling is concerned, it is enough to say that both gold and silver are too bulky and heavy for the ordinary transactions of business. Only a minute percentage of large payments is made in either metal, nearly all of them being made with paper, or by transfers of credits. What is called gold in the markets and in the bank reserves in this country, is to a considerable extent not really that metal, but certificates of the deposits of it issued in money-note form by the Secretary of the Treasury of the United States. Such certificates may and ought to be issued upon the deposit of silver, which can be held at less risk than gold. They should be issued for bars of both metals, stamped at the Government assay-offices, as well as for coins. They would be much more convenient for money use than coin of either metal. The habits and prejudices of the people of the United States are confirmed in favor of a safe paper money. If by safety is meant constant convertibility at will into coin, no paper money could be safer than that based dollar for dollar on coin or bullion in the government vaults. Such paper would be universally used in transacting the business of the country. A certificate in money-note form issued by the United States Treasury for a deposit of silver in its vaults, would be neither heavier, bulkier, nor less convenient than a like certificate issued for a deposit of gold.

Jevons (Mechanism of Money, page 203) says:

> The use of representative money is becoming so general in the most advanced commercial countries, that the portability of metallic money is a question of very minor importance.

The Journal of the London Statistical Society (March, 1875) says:

> Such is the development of credit in this country, that it has been roughly calculated that 97 per cent. of payments are ordinarily effected by checks, bills, and other expedients of credit; about 2½ per cent. by bank-notes; and about ½ per cent. by coin.

In this country the proportion of money used in settling balances, reckoning both bank-notes and coin as money, is somewhat larger than in England, but is still small.

III.

THE COMBINED MASS OF GOLD AND SILVER HAVING BEEN THE MONETARY MEASURE OF VALUES, IS IT JUST TO REDUCE THE MEASURE BY DISCARDING EITHER METAL?

The facts that both gold and silver have heretofore been used as money, that prices have been controlled by their combined volume, and that existing contracts on an enormous scale have been entered into on that basis by states, municipalities, corporations, and individuals, are the most important of all the facts to be considered in respect of propositions to demonetize either metal. If gold alone had always been used as money, although less steady as a measure of value than gold and silver together, and in other respects less desirable, the objection would be well taken, that the addition of silver would double the existing volume of money and thereby depreciate it, and thus injure the creditor. The arguments of justice and expediency are more cogent against diminishing the mass of money by discarding silver, when both gold and silver have been always and almost universally used as money. The great majority of creditors have other connections with the business operations of the communities in which they live, and other forms of investment than those which constitute them creditors. What they would gain as creditors by a contraction in the volume of money, would be partially, if not entirely, lost by their unavoidable participation in the general depression resulting from the fall in prices which such contraction would occasion. Alison (England in 1815 and 1845) says of the currency contraction brought on by the British gold-resumption policy of 1819–'21:

> There can be no doubt that the reduction of interest has injured the holders of the available capital of the country nearly as much, in many cases, as the producing classes have been injured by the fall in the money-prices of their commodities. * * * Probably it has reduced the incomes of creditors forty per cent.

And so, on the other hand, what they might lose as creditors through an abundance of money and a general rise of prices would be more or less compensated by the buoyancy and activity of business, and by the enlarged revenues from real estate and fixed capital, which follow an increase in the volume of money. To the debtor classes there is no compensation for the appreciation of money, and they are less able to bear losses. This difference in the respective conditions of debtor and creditor was well summed up in the following language in a report made to the United States Senate, June 9, 1868, by Mr. Sherman, chairman of the Committee on Finance:

> The depreciation of the burden of debt is a loss to a class generally benefited by the increased values of fixed property, and better able to bear the diminution of their capital; but an increase of the burden of the debt to the debtor class often produces absolute ruin.

Price, the expression of a relation between money and other things.

Price is the expression in money terms of the relation which the unit of money bears to a specified quantity, or the unit of each and every other thing in exchange. It is also the expression in units of property and services of the value of the unit of money, and without having any influence on the relations is the sure indicator of the exchange relations which the units of all other things bear to each other. Market-price is the expression in the units of money of an equilibrium between the correlative demands of buyer and seller. It is, in fact, generally established through a competition between sellers, rather than buyers; the market-price of any article being the smallest quantity of money for which the unit of such article is offered for sale in open market. By the word unit, when applied to money, is intended that denomination in which accounts are kept, and in which judgments are rendered for money, as the dollar in this country and the pound sterling in England. By the same word, as applied to commodities, is intended that specific portion or quantity by multiples or fractions of which all quantities are accustomed to be described, as a ton for coal, or a yard for cloth. The relations in exchange of all other things than money are not at all affected by the volume of money, or by its increase or decrease. Nor do changes in the volume of money practically affect a transaction wherein a seller of property makes immediate purchase of other property with the proceeds of such sale. Exchange by barter can be as equitably effected under one volume of money, and under one range of prices, as another. But under a credit system, where contracts aggregating a vast amount, to pay money at future periods, have been made, steadiness in prices becomes the all-important consideration, and that steadiness depends on the steadiness in the quantitative relation between money and all other things. The performance of contracts to deliver commodities or render services is not made either less or more difficult by an increase or decrease in the volume of money. But nearly all contracts in the commercial world are for the future delivery of money, and the consideration received and the promise made in such contracts are based on existing prices. The command, therefore, which commodities and services may have over money in the future, and which will find its expression in price, becomes a matter of vital importance.

Whenever under any firmly-established government a system of money has been generally accepted, the value of each unit of such money becomes a general mental conception, which, if it be what is called a value, or metallic money, is not based on the past or probable future cost of producing the material of which it is composed, nor on the average cost of its production, nor on the cost of its production in either the most or least prolific mine. Nor, if it be what is called credit-money, having full legal-tender functions, is that portion of it which is unhoarded and in circulation and performing the functions of money, based upon the present value of the promise of the issuer to redeem it, nor upon the proximity or remoteness of such redemption.

Under firmly-established systems the value of each unit of either metallic or fiat money depends absolutely upon the number of such units and the relation they bear to the services they are required to perform. The purchasing-power of the world's entire stock of metallic money would neither be increased nor diminished by an increase or diminution of its magnitude, if other things should at the same time remain unchanged. The value of that stock can only be changed by an increase or diminution of the things which it is the function of money to measure. If the volume of either metallic money or accepted fiat money should be doubled at however great or little cost, other things remaining the same, the aggregate value of neither would be changed, but the value of each unit would be diminished one-half.

The cost of producing the precious metals has no direct influence upon the value of metallic money, but might tend, although the history of mining does not show this to be the case, to stimulate or discourage production, and, consequently, in long periods of time, to affect the magnitude of the metallic money stock, and it is the magnitude of that stock relative to the amount of services it is required to perform that controls the value of each unit of either metallic or fiat money.

But even if it were true that an increasing value of money stimulated mining, the nature of the occupation is such that the increase of the yield would be slow and doubtful, and unless there should occur such improbable if not impossible discoveries as those of California and Australia, whose recurrence has been marked by the lapse of centuries, generations of falling prices and ruin might come and go before relief could be had.

In a great majority of the instances, in which the current metallic supply has been largely increased, it has not been due to any stimulus given to mining by the increased value of money, but to the purely chance discoveries of new mining-fields. As often as otherwise, these discoveries have been made accidentally by persons while engaged in other pursuits than mining. And whenever they have been made by those engaged in mining, the surrounding circumstances show that they were as likely to have been made at one time as at another, and without reference, except in a remote degree, to the increasing or decreasing value of money. Indeed, it is to be doubted whether the cost to the miner of producing the precious metals differs at different times, and whether the amount produced does not depend entirely upon accidental discoveries. However this may be, nothing can be more certain than that the production of the precious metals bears no scientific relation to the increase or decrease of population and commerce, which alone should govern the increase or decrease of the stock of money.

In respect to almost all other commodities, an advancing price causes an immediate increase in production. In agricultural products a single year suffices, and in manufactured articles periods far short of a year, and the increased production requires no movement of populations, but only a different direction of their industries. Gold and silver mines are generally found in sterile regions, remote from populations, and destitute of the supplies and materials needed in mining. It is only a small portion of the human race that are both able and willing to leave the comforts and conveniences of home to engage in such a hazardous business as mining even in fields already discovered, and the number is still less, whatever might be the exchangeable value of money, that would be ready to embark in a new Argos in a new search for the Golden Fleece.

If the present current out-turn of the precious metals were produced without any cost whatever, and if, at the same time, the sources of production were so controlled as to prevent any increase thereof, the value of the product would be precisely the same as it is under existing circumstances. If, for the purpose of maintaining intact the world's metallic money stock, and of furnishing the additional quantity required by increasing population and commerce, the various governments should raise a fund for the mining of the metals, and if each grain were produced at a cost equal to the value of three grains, the value of the product would not and could not be at all enhanced by that consideration. This process might be continued indefinitely and forever without increasing the value of the metal so produced over its previously-existing value. If, through this governmental production, the stock were increased beyond current requirements, the value of each grain produced, notwithstanding the high cost of its production, would be decreased in inverse ratio. It is the limitation of the quantity of money, without any reference to the cost of its production, that regulates the value of each unit of money, whether fiat or metallic. In the case of fiat money, the limitation is imposed by law. In the case of metallic money, it is imposed by nature. The effect of limitation upon the value of money is precisely the same in both instances. In the one case the limitation is regulated by the wisdom and justice of man; in the other, it is regulated by the variable and uncertain obstacles which nature opposes to the production of the metals. *The value of money, of whatever kind, is measured by the cost of obtaining it after it has been produced, and not by the cost of its production, and this value is indicated by the general range of prices.*

The calculations of those who contract to pay money are always based upon the general command which units of property and services have over units of money, and their expectations of meeting their contracts when they mature rest upon their confidence in a steady continuance of that command and upon their knowledge that the services or property which they control will, at that rating, be sufficient. But such contracts can only be satisfied legally by the delivery of the specified number of the units of money.

If, in the mean time, population, commodities, and commerce should increase, and the stock of money should not increase in corresponding ratio, or if commerce and population should remain stationary, and a large portion of the money in existence when the contract was made were struck down by legislation, the equilibrium between money and other things would be disturbed. The money unit would rise in value and prices would fall. The debtor would find that it required more labor and more property to meet the terms than it would to meet the equity of his contract. But the terms, not the equity, must be met, and the debtor must submit to the partial or entire confiscation of his property.

Prices, notwithstanding the use of banking expedients and credits, governed by the volume of money.

It is sometimes maintained that a compensation can be made for a shrinkage in the volume of money by an increase of such banking expedients as checks, bills of exchange, and clearing-houses. These expedients are now resorted to, and, because profit is found in their use, always will be availed of to the utmost possible extent. It is manifest, therefore, that, whatever the proportion or percentage they bear to the volume of money, it cannot be increased except through an increase in that volume. And it is as manifest that, when the volume of money is diminished, these expedients must diminish, and prices must fall in a corresponding ratio. Money is the primary and governing force whose functions cannot be superseded by any device whatever, and whose volume or existence does not depend on banking expedients, while these expedients grow out of money and could not exist without it. The farthest extent to which they can be used is already practically reached, and they can only increase, and must decrease, as the volume of money increases or diminishes.

This reasoning partially applies as to the effect of credit on prices. It would seem to be reversing the natural order of things to maintain that prices are controlled by the volume of credit instead of by the volume of money. Without entering into an elaborate discussion of this intricate question, it may be said that prices were affixed to property at the time when the invention of money superseded barter. Credit, as it is now understood, was impossible under the barter system, and must have come into existence at some period after values were measured through the medium of price. Primarily, then, prices must have been entirely controlled by the volume of money, unaffected by credit.

Credit is the explosive element in the business of modern times. If it were extended upon property at such a rating of prices as would be established through money alone, and if the relation between the volume of money and population and commerce remained steady, prices would remain steady, and the great mass of credits would rest upon a sound basis. Even under such conditions there would be speculative and unsound credits, but these would be exceptional, and the injury caused by their collapse would be local, individual, and temporary. There never can occur a universal fall of prices and a general withdrawal of credits without a preceding decrease in the volume of money.

It is contended by many that credit is based on the combined volume of property and money, and that a diminution of the volume of money need not occasion any greater withdrawal of credit than such proportion as the diminution would bear to the aggregate amount of property and money. But the amount of credit which can, or will be, extended upon property, depends upon its price, which is supposed to represent the cash it can be sold for, and price depends upon the relation between the volume of money and other things. Property which might be ample security for a given quantity of money at one range of prices would be an inadequate security at a lower range. If all the money of the world were diminished by one-half, the amount of credits that could be safely extended upon property would be diminished in at least as great a proportion. It is money, and not property, unless the creditor shall choose to accept it, that is required for the payment of debts, and the power of property over credit is limited to its command in open market over money, which command must be greater or less as the volume of money is larger or smaller. If the amount of credit which can be safely extended upon property be not governed by the price it can be sold for, then credit must be an institution based upon the whims and caprices of those who extend it. If credit is either increased or diminished upon property which has undergone no physical change, and without reference to its price, such increase or diminution must be ascribed to the abnormal mental condition of the money-lender; this is a disease which, as it is not caused by a change in material conditions, is beyond the reach of the remedies of the political economist, and must be treated psychologically.

The mistake is often made, that prices are not controlled by the volume of money, because they have neither risen nor fallen concurrently with, nor in exact proportion to, the increase or decrease of such volume. The precious metals are diffused over so vast a surface and their current production is so small in comparison with accumulated stocks that it takes considerable time for changes in their yield to so affect their volume relatively to population and business as to produce any sensible effect upon prices. The entire property-interests of a country are united in maintaining, and if possible in advancing, the price of property, and in resisting to the uttermost any decline. A temporary maintenance of nominal prices, even in the presence of a shrinking volume of money, is especially practicable with imperishable property, such as real estate. When money begins to become scarce, by reason of a shrinkage in its volume, the first effect upon real estate is found to be, not a decline of its nominal price, but a diminution in the number of transactions. Market-reports quote real estate "*dull;*

few sales, but prices firm." This stagnation is ascribed to temporary causes, and a speedy recovery predicted. In order to maintain prices the terms of purchase are made easier. The amount of cash payments is reduced, and the deferred payments, secured by mortgage on the property, extended over longer periods. After a time this expedient fails, and, even then, nominal prices are unnaturally held up for a short period by the struggles of those who have purchased upon these extended credits, and by the tenacity of owners who refuse to sell at lower figures, and mortgage their own property to protract their power to hold. The stagnation of voluntary transactions is finally followed by the activity of involuntary ones under the direction of sheriffs and by the foreclosure of mortgages.

Upon any material decline in the price of real estate, a large class of investors, believing that the bottom has been reached, and desiring to profit by the reaction which they think is sure to come speedily, enter the market and temporarily check the decline. Another fall in prices sweeps them and their margins away, and a third class of dealers, now absolutely certain that bottom prices have been reached, and sure that a further decline is impossible, come in as purchasers. Each succeeding purchaser fortifies his conclusion that present prices are bottom prices by comparing them with and finding that they are no higher than the prices of some period in the past which is arbitrarily assumed to be a standard level, below which subsequent prices could never permanently go. It is overlooked that price is only the expression of a relation, and that no correct conclusions can be drawn from a comparison of the prices of two periods unless comparisons be also made of the money stock, population, and exchanges of both periods. Contrary to all calculations as the volume of money shrinks prices continue to fall, and these dealers encounter the fate of their predecessors. These operations repeat themselves until universal distrust prevails, and until it is found that, when money is decreasing in volume, prices have no bottom except a receding one, and that they are inexorably ruled by the volume of money. The effects of a decrease of the volume of money in a particular country arising from its abnormal outflow or from its withdrawal from the channels of circulation through the distrust which prevails when unsound and speculative undertakings are breaking down, or when the country is convulsed by political disturbances, are the same as the effects of a general decrease in the volume of money. The result in both cases is a fall in prices. But in the first case the equilibrium is restored by a quickly-returning wave of prosperity, and the evils resulting are confined to individuals and to special localities; and those dealers are fortunate who purchase in the first stages of the decline. But in the second case the cause of the fall in prices is radical, and must continue until prices go out of existence, unless the decrease in the volume of money is arrested. In the whole history of the world every great and general fall of prices has been preceded by a decrease in the volume of money. There has never been a decrease in the volume of money, nor has there ever been a stationary volume of money, unless accompanied by a stationary population and commerce, which has not sooner or later resulted in a general fall of prices, and there has never been a recovery therefrom except through a preceding increase in the volume of money. After the volume of money has begun to decrease every dollar of credit extended at the old range of prices aggravates the disaster which must come sooner or later. Stagnation and panic are nothing more nor less than the results of a struggle to make prices express truly the relation between money and all other things. Fluctuations of prices frequently arise from special causes, but they are local and temporary in their character.

Even were it possible to devise a money system so perfect that steadiness in the general level of prices would be absolutely assured, there would still occur occasional fluctuations in the prices of particular commodities, arising from a temporary glut or scarcity of such commodities in the general markets, caused by exceptionally favorable or unfavorable conditions, which might suddenly enlarge or diminish their production, or vary the demand for them. Such fluctuations cannot be avoided. They mark the ebb and flow of business and no more affect the general level of prices or prosperity than the ebb and flow of the tides affect the general level of the ocean. The producers of and dealers in each article should be better able than anybody else to foresee and guard against them, and have no reason to complain of them. But they may well complain when the general level of prices is disturbed by monetary legislation, which they could not foresee, are not responsible for, and whose injurious effects they could not by any degree of prudence avoid.

There have long existed two opposing theories in respect to money.

Views of the metallic school.

One school advocates a continuance of the generally prevailing system of money made of the two commodities, gold and silver. The especial merits claimed for this system are, that its workings are entirely automatic, that the money value of the commodities upon which it is based depends upon their useful intrinsic qualities and is measured by the average cost of their production, and that their volume depends upon the yield of the mines and not upon the caprice of legislation. They claim that the province of the government is not to create money, but to coin it, and thereby give to it the best authentication of purity and weight. Very many of this school claim that the investiture of such money with the function of legal tender is merely a designation of a coined commodity for which judgment shall be rendered in civil actions, and that the value of the commodity is not affected by it, while others, who concede that the use of such commodities as money adds something to their value, claim that the law, in conferring the legal-tender function, only ratified what long usage had established. They all maintain that there should be no restrictions on the coinage of any or all of both metals which the mines yield, and that when coined their legal-tender functions should be unlimited. They claim that every conceivable system of money has been tested for scores of centuries in the crucible of experience, and that the fittest, the metallic system, has alone practically survived. They admit the unsteadiness in the value, and consequently the imperfection, of metallic money caused by variations in the consumption, yield, and cost of producing the metals, and by many other unavoidable circumstances and conditions. They admit that at certain periods these causes may increase the value of the money unit to the advantage of the creditor, but they claim that at other periods opposite conditions would be sure to operate in the interest of the debtor, and that in the long run it would be "as fair for one as for the other," and that whatever might be the injustice inflicted on individuals, and whatever the fluctuations in individual fortune, the general equitable balance between debtor and creditor would be maintained. They claim that the use of metallic money is spread over so vast an area that changes in the current metallic supply would be slow in making themselves felt, and that the elastic qualities of credit expedients would prevent temporary changes from being felt at all. They claim that any decided increase or decrease in the value of metallic money would so stimulate or discourage mining as to restore the equilibrium sooner or later.

They admit that there is no remedy for the perturbations in the value of metallic money arising from fluctuations in the supply of the metals. But they claim that experience demonstrates that there is a limit to the accidents and freaks of production, and none to the folly and designs of legislation; and, consequently, that the perturbations in the value of paper money would be greater and equally without remedy. They urge that the power to increase or decrease the volume and value of money at will by legislation, and, consequently, to hold at will the fortunes of individuals and the prosperity of nations, would be a most dangerous one, and that the ever-present necessities of governments would be a constant temptation to its abuse.

They claim, finally, that whatever may be the faults of metallic money, those of paper money are worse; that nothing but intrinsic value can measure value, and that paper money has no other than a representative value, and therefore cannot measure intrinsic value, but that the precious metals possess intrinsic value, and for this reason are fitted to serve as its measure; that value inheres in the quality of a material thing, and not in mental estimation, and hence that nothing but a material thing possessing it intrinsically can serve as its true standard; that the danger of paper money is illustrated by precept, philosophy, and example, and that the financial, political, and social wrecks of states and people, with which it has punctuated history, should serve as warnings against it.

Views of the inconvertible paper, or fiat money school.

The other school advocates an exclusively fiat paper money, to be issued by the Government, which should possess no value on account of the intrinsic qualities of the material of which it is composed, but whose value should be extrinsic and derived from the useful functions with which the Government invested it, and whose each unit should be kept steady in value through legal limitations and regulations of the number of such units issued.

The views of this school are that utility, accompanied by limitation of quantity, is the basis of exchangeable value. That this utility may either depend upon such intrinsic qualities as would render the thing possessing them valuable to man in isolation as well as to man in society, or upon extrinsic, artificial qualities which society may confer upon any article, however intrinsically valueless, by endowing it with the power of performing the money function. That the evident fact that this function does not inhere in and cannot be conferred on any article so as to make it either valuable or useful to man in isolation, while it is essential to the very existence of society, demonstrates that money value is not derived from the useful, intrinsic qualities of the material upon which the money function may be conferred. They also call attention to the facts that, the usefulness to the individual of any article depends solely upon the intrinsic qualities which it may possess, and is not at all diminished by its existence in unlimited quantity, but that money, on the contrary, becomes entirely useless unless its quantity be limited. They conclude from these facts that the money value of the material of which money is composed rests solely upon the purely artificial and extrinsic qualities conferred upon it; that this value is inseparable from society, and grows out of its need of and demand for an instrument of valuation and exchange.

They maintain that money is not in itself wealth, but a set of counters for computing and exchanging wealth, or, as was said by Bishop Berkeley, "*a ticket entitling to power and fitted to record and transfer this power;*" and that "*it is of little consequence what materials the tickets are made of:*" that there are certain qualities which are essential to a proper performance of the money function; that money should be steady in value, portable, divisible, distinguishable, and difficult of imitation; that of all these qualities steadiness in value is the one most essential and indispensable; that the highest office of money is that of measuring values, present and future, and that to perform this office equitably its each unit must possess through time a practically unfluctuating, unvarying purchasing power; that as this steadiness can be secured only through a limitation and regulation of its quantity, the power of limitation and regulation should be always present, and that to this end the material of money should be producible at all times without limit, and as near as possible without cost, and destructible without loss. They maintain that when the money function is conferred upon gold and silver, while the requirements of portability, divisibility, distinguishability, and difficulty of imitation are tolerably met, the requirements of constant attainability and inexpensiveness are not met at all, and that the superlatively essential requirement of steadiness in value is so imperfectly met as to render them unfit for money. They claim that the money function is the noblest of all functions and invests anything upon which it is conferred with a utility far greater than is possessed by any other exchangeable article known to man; that this utility is the true and only scientific basis of money-value; that the value begotten of this utility is all that is needed for money and all that money can possibly possess, and is all and the only kind of value ever estimated, when money, whether metallic or fiat is used. That whenever the material of money is in demand as a commodity, such demand can neither increase the money-value nor disturb either the commodity or the money until it rises to the level of the money demand, when it begins to destroy the money. That this is illustrated in subsidiary coinages and in the full-tender silver coinage of the Latin Union, the bullion-value of which, being below the money-value, prevents the metal in the coin from being either exported or used for other than money purposes. That in that coinage it is the legal tender function conferred by the sovereign authority and verified by its stamp, and not the metal that receives the impression, which really constitutes the money, and that this stamp of authority would be as efficient and valuable if impressed on paper, and that this had been shown in the experience of our fractional paper currency. That while the bullion in this coinage has added nothing to the value of the money, the government stamp has effectually deprived the world of the use of the bullion, and that the cost of the bullion is a loss to the people for which there is no compensation. That the aggregate of the money-value which can exist in any country is limited, and fixed automatically by its environment. That it bears a sure relation, however indeterminate, to the population, wealth, and exchanges of such country as modified by the character and habits of the people, their modes of transacting business, the rapidity with which their exchanges are effected, and many other considerations. That this value exists potentially wherever there are exchanges to be made. That in order to utilize this value it is only necessary for the law to materialize it, whereupon it becomes money. That it is independent of all other values, and cannot be mixed with them. That it cannot be in any degree increased by the commodity value of the material selected for money. That the commodity value can only make itself felt through a destruction of the money. That as long as the commodity continues to perform the money function, the commodity value, instead of adding anything to the conferred money-value, is entirely suspended and non-effective. That the only argument that can be advanced in favor of investing any material substance possessing intrinsic value with the money function, is, that the holder would be secure to the extent of the commodity value, even though society, laws, and systems should break down. That there is no gain in this security, as it must have been purchased at the outset by the community, including the holders of money, at its full value, and that there would remain uncompensated the great losses to the community, including such holders, which arise from a vicious money. That when paper money depreciates, or even breaks down entirely, the process is ordinarily so gradual that the losses of individual holders are inappreciable. That the money of all countries, whatever may be its material, is nothing but the sum of the integrant parts into which the money-value is divided. That the value of each of these integrant parts, or units, will depend upon the number of parts into which this value is subdivided. That in case this value is subdivided through the use of the precious metals, these units, or integrant parts, are subjected to variations in their value through an increase of their number from unknown and accidental supplies from the mines, and through a decrease by the unknown number of such units which may be consumed in other uses. That while the cost of producing such units adds nothing to their money-value, the uncertainty of producing them, and the uncertain quantity destroyed after being produced, render it impossible to regulate the number, and consequently the value of, such units. They maintain that the aggregate of the money-value can only be increased or diminished by an increase or diminution of the productive forces and wealth which it measures and which govern it. That the increase or decrease of the number of the units of money can have no effect upon the aggregate of the money-value, but that the number of such units simply determines the fractional part of the whole value belonging to each unit; that the money-value will inhere in any material substance whatever upon which the sovereign authority may confer the money function. That whenever the law declares that paper in a certain form, upon being stamped with authoritative and distinguishing marks and devices, shall be invested with the money function, each piece of such paper so stamped becomes not a debt, nor a credit, nor a promise, dishonored or otherwise, nor a representative of gold or silver, nor of any one thing, but of all things; that it becomes the thing signified, not a sign, and to all intents and purposes lacking no quality, but possessing all, becomes money, pure, simple, and unadulterated, with a value not less real because not mixed with an intrinsic value, than the money-value conferred in the same manner and by the same authority on gold and silver, nor less real than the intrinsic value of those commodities. They claim that money can be maintained steadier and more uniform in purchasing power, and made to perform its true functions with greater exactness, when composed of some material substance always attainable and not possessing utility or value for other purposes, than when composed of such substances as gold and silver, possessing such values, and difficult and uncertain of attainment, and subject to other than money demands. That the commingling of money-value and commodity value in one substance is an intermingling of things whose uses are inconsistent with and whose elements have no affinity for each other; that it is a confounding of barter with price, and of measure with the thing to be measured; that the uncertain, varying, and generally increasing demand for the commodity subjects the money to vicious perturbations in value, while the superior and constant demand for the money renders the commodity more steady in value than it would otherwise be; that the greater steadiness thus gained in the commodity value is of no importance or benefit whatever, while the resulting unsteadiness in the value of money is a transcendent injury to the world; that the commodity demand for gold and silver not only exerts a disturbing influence on the value of metallic money, but unfortunately always exerts it in the ruinous direction of increasing that value by diminishing its volume, and still more unfortunately that, as wealth and population increase, old uses increase and new uses are discovered; that to unite commodity and money in one substance is to plant in money the seeds of its own destruction; that the arts, resisting the invasion of their legitimate domain, are constantly absorbing the coin; that such money is costly and unscientific, and only an improvement on the barter system, and retains vicious ingredients of that barbarous method of exchange; that it is as imperfect an instrument for measuring values as would be a thermometer for measuring heat if its fluid indicator were subject to constant disturbances to an unknown extent from other influences than heat.

They maintain that the fluctuation in the value of metallic money caused by the encroachments of the commodity demand is sufficient of itself to condemn the use of gold and silver as money, but that when to this are added the enormous fluctuations in their supply the argument against their use becomes conclusive.

They claim that adequate metallic supplies in the future will depend, as in the past, upon the accidental discoveries of gold and silver mines, and upon the policy and mining laws of the governments controlling the locality of the discoveries, if fortunately they should be made.

They maintain that the industry of gold and silver mining is more subject to chance and less governed by the economic laws of production than any other pursuit, and consequently bears only an accidental relation to human efforts in other fields, and that therefore the product of such industry is uneven and ill-suited for a measure of all values. They claim that the world's supply of metallic money, and consequently its value, is not only subject to the vicissitudes inherent in the business of mining, but is largely increased or diminished, as the case may be, through political complications, and through other conditions which have no necessary connection with mining. As a signal illustration of this, they refer to the decrease of the supplies of gold and silver after 1809, caused by the revolutions in the Spanish-American colonies, and to the enormous increase of the supplies at a later period, through the acquisition and occupation of California, which resulted from the success of the democratic party in the close presidential election of 1844, and which might otherwise have been postponed indefinitely. That of these two noted changes in the metallic supply, resulting from facts having no necessary connection with mining, the first nearly bankrupted the world, while the second stimulated industry and commerce to an extent never before known.

They say that in addition to the evils which result from fluctuations in the supply of the precious metals is the fatal evil of inadequacy of supply which is now pressing upon the industry and commerce of the world with crushing severity; that this inadequacy is constantly becoming more marked and threatens to continue indefinitely. They refer to the facts that the yield of the precious metals since

1847 has been unprecedented, aggregating the enormous sum of $4,500,000,000; that this entire amount, swollen by the sums liberated by suspending countries, has been permitted to flow uninterruptedly into the few countries maintaining the specie basis; that notwithstanding all this prices in these latter countries have for a number of years been falling, and still have a downward tendency, and have already nearly sunk to the level of the prices of 1847, when the great mines of California were discovered; that the most prolific sources of metallic supply are showing unmistakable signs of exhaustion; that the yield is now and has been for some years stationary or declining; that the hope is neither entertained by the most scientific explorer nor the most visionary gold-seeker that mines equally prolific with those of Australia and California will ever be discovered; and that in the presence of this failing supply stands the constantly-increasing demand of steadily-advancing populations. They insist that these facts show that, even if the precious metals were otherwise fit for money, the utter improbability of obtaining them in sufficient quantity, except on the basis of ruinous prices, interposes an insuperable objection to a money system founded upon them.

They maintain that by reason of the great variations in the supply of the precious metals, and the purely accidental relation which that supply has borne to the world's demand for money, the movement of the human race in wealth and civilization has been fitful and spasmodic, and not always progressive; that the business of the world in all times past has been, through fluctuations in the supply of money, now stimulated by fever and now prostrated by collapse; that industry and commerce have been alternately borne high on the flood-tide of metallic production from newly-discovered mining-fields and stranded on the shoals of bankruptcy by the refluent ebb; that, unfortunately, the ebbs and flows of these tides are of unequal duration; that the flux of prosperity has usually lasted but a brief period, while the reflux of adversity, with its attendant circumstances of falling prices, industrial paralysis, and destitute populations, has been painfully prolonged; that the tide of metallic production which commenced its flood in 1847 turned in 1865 to an ebb that still continues, and threatens to pauperize populations and bankrupt nations; that through the discovery of steam as a motive power the obstacles of time and distance have been practically overcome, and that the world is no longer new; that the search for the precious metals has been pushed to every part of the earth, with indifferent success, by skillful explorers fresh from the fields of California and Australia, and hence, that the chances of discovering new and great mining-fields, and more especially gold-fields, if not absolutely at an end, are less hopeful than at any former period; that the exploitation of known mining-fields has been prosecuted in recent years with such energy, capital, skill, and appliances as to forbid the expectation of an increase in their yield, and especially such an increase as would supply the world's increasing demand for money; that however well metallic money may have been adapted to the circumscribed business and political and social conditions of the past, the growing industry and commerce of the world cannot afford to have their lusty limbs shackled by it in the future; that the extreme difficulty which attends the efforts of the United States to secure metallic money enough for its wants, although it is the only one of the large number of commercial countries in suspension that is attempting to reach a metallic basis, demonstrates the utter insufficiency of the stock of gold and silver for the general money uses of the commercial world; that this insufficiency is palpable, and generally admitted by the bullionists themselves, who, nevertheless, persist in affirming that not only is the highest development of commerce and civilization, but even any tolerable degree of prosperity, impossible, except with metallic money; they submit that thus to insist that such money is essential to any advanced prosperity, and at the same time to admit that it can be obtained by only a few nations, and to the exclusion of all the others, is to deny the eternal fitness of things, to deny the adaptation of material conditions to human progress, to deny the harmonies of nature, and to deny that an intelligent and beneficent design is manifested in creation.

They maintain that as the most important function of money is to measure values and to preserve equities in time transactions, the great bulk of which are internal and between citizens of the same country, and all of which are expressed in the money of some particular country, it follows that any system of money that is common to several countries is a vicious one, in that it subjects the entire internal business of each of them to all the disasters originating in the political or financial mismanagement of the government, or in the political disturbances, follies, misfortunes, or reckless speculations of the inhabitants, of any one or all of the others; that money is simply the instrument of commerce and industry, and not their object; that a sufficiency of it is better than more and infinitely better than less; that the outflow of money from one country to another having money systems in common, is a double injury. That it is an injury to the country that receives it, and a greater injury to the country that parts with it. That it tends in the one instance to produce crises through inflation, and in the other panics through contraction. And that in addition to this is an injury to each on account of the derangement of the trade of the other; that the invention of money is but half completed when the necessary limitations and regulation of its quantity, and consequently of its value, are remitted not only to the vicissitudes and chances of mining, but to the vicissitudes in the business and legislation of foreign countries; that these facts and considerations, and many others which might be urged, show that metallic money is an inaccurate money, that it fills only in a moderate degree any of the requirements of a perfect system, while, in essential particulars, it so far fails to fill them as to render it unfit for an advanced civilization.

They claim, on the other hand, that every requirement of a perfect system can be met more nearly and more certainly by paper money than by any other ever devised. Not paper money based upon gold, silver, or any other fluctuating commodity, whose measure it should be; nor upon a promise of commodities, near or remote, definite or indefinite, of governments, or banks; nor like the French assignats, based upon lands; nor fastend to gold or silver by a chain sure to snap when the metals are wanted; nor convertible into bonds and thereby offering the bribe of interest for its withdrawal from circulation; nor of any use to its owner except when parted with; nor capable of yielding profit except when employed in the production and distribution of wealth; but an absolute money, whose value, conferred by the sovereign authority, and regulated by a pre-arranged and perfected system, and not by the passions and caprices of the hour, would rest impregnably on functions essential to civilization and progress.

They claim that it would be more portable, more difficult of imitation, more easily verified, more readily divisible, and less expensive than metallic money; that as quantity controls the value of money, the all-important quality of steadiness in value could be better assured through a system which subjects that quantity to absolute control than through the metallic system, which remits the regulation of quantity to accidents and vicissitudes, industrial and political, sometimes through the resumption and suspension of the yield of the mines, and sometimes through the resumption and suspension of specie payments in any and every country; that as paper money is producible substantially without labor and without expense, its exclusive use would be an addition to the public wealth equal to the entire cost of supplying and keeping up the supply of the necessary quantity of metallic money. That in order to make it secure and possess the highest degree of utility, paper money should be issued exclusively by the government, to the exclusion of all other kinds of money; that it should be regulated in value through an equitable adjustment of quantity by virtue of laws which should take effect only upon the occurrence of conditions-precedent not dependent upon legislation, such as an increase or decrease of population; that it should be reciprocally receivable by government and people, and between the people themselves; that its each unit should be convertible, not at any specific time or place, nor into any specific quantity of any particular product of human industry, such as gold or silver, but at all times and in all places where the sovereign power gives it the right to circulate and to the full extent of the value determined as above, and into any and all of the products of human industry, including those metals.

They claim that every argument against investing with the money function a material not possessing intrinsic value is, when analyzed, an impeachment of the integrity and capacity of the people and of their fitness for self-government, and a claim that the regulation of the most important institution of civilization can be more safely remitted to the edicts of chance than to the guidance of human wisdom.

That the failure in times past to establish satisfactory systems of paper money no more proves that such systems are impossible than the innumerable abortive attempts throughout the ages to establish individual liberty proved that political freedom was impossible. That if the French assignats broke down, so also did the French republic, and mainly for the similar reasons, that the French people did not then fully comprehend the true nature of either liberty or money. That the same degree of virtue and enlightenment necessary for the establishment of the one is necessary for the establishment of the other. That the failures of efforts under revolutionary or despotic governments to establish paper money systems have no significance whatever. That no such effort has ever been made under free institutions firmly established, without which perfection in the money, or any other system which affects the general welfare, is impossible. That the failures of one age often become the established successes of the next. That every progressive movement of mankind has been tedious and toilsome and has been accomplished only through trial, suffering, and the disappointment of repeated failures. That every step of this progress has been impeded by a sinister conservatism which glorifies everything, even tyranny and stupidity, if hoary with age, and always seeks to rivet the needs of the present to the decaying and imperfect systems of the past, and to deny to the human race the hopes and possibilities of the future. That there have been the same evolutions of progress in money as in all other things. That in the rude original of society no kind of money was possible. That the first trade was by barter, after which, some one or more commodities attainable in the vicinage, and in general use and demand, were selected as the common medium through which all exchanges were filtered. That the use for that purpose of various metals by weight followed next, and, at a succeeding stage, gold, silver, and copper by weight, and after this their use in the form of coins, the value of which coincided with the bullion-value. That in most countries coined money has been sometimes supplemented and sometimes superseded by promises to pay coin, which were always broken when coin was demanded. That the next step in many countries has been a coinage maintained above its bullion-value through limitation of quantity and the stamp of authority as in subsidiary silver coinages, and at the present time in the entire silver coinage in the states of the Latin Union. And that since the success of this last step in preserving, through limitation of quantity, a steadiness of money value above and wholly independent of intrinsic value has been assured, it would be presumptuous to affirm that the same means may not furnish, without any intrinsic value whatever, a better and steadier money than the world has ever seen, and that such money will not become the money of the future.

They admit that wherever society is divided into two distinct classes, the governing and the producing class, a fiat money is open to serious if not fatal objections, the chiefest of which is the danger of trusting its issue to the good faith of the rulers, whose profligacy, ambition, and extravagance would be sure to impel them to vitiate and ultimately destroy it by excessive issues, as they have from the same motives frequently debased metallic money, and that the scales and crucible afford some protection against the debasement of metallic money, while an overissue of paper money, when in the hands of the governing few, can neither be guarded against nor remedied. But they claim that in the present enlightened age the true function of money is better understood than at any former period. That with all the experience of the past to warn and guide, false systems may be avoided and a true system established. That such countries as have free, stable, and constitutional governments and advanced systems of jurisprudence, and which furnish universal opportunities for education and whose citizens are by the practice of liberty accustomed to self-imposed burdens and restraints, can be intrusted with the regulation of the volume and value of fiat money, with a full assurance that it will be regulated with wisdom and equity, and they maintain that it is the only kind of money whose value can be scientifically regulated.

A concession to the paper theory—A new scheme of metallic money that abandons automatic regulation and acknowledges the interference of government to be necessary to secure steadiness in the value of money.

The world has generally favored, theoretically if not practically, the automatic metallic system, and adjusted its business to it. Some nations adopted one metal as their standard, and some the other, and some adopted both. Those that adopted both metals served as a balance-wheel to steady with exactness their relative value. The practical effect of all this was the same as if all nations had adopted both, because it secured the entire stock of both at a fixed equivalency for the transaction of the business of the world. While some nations have changed their money metal, or, having had paper money, have resumed specie payments in one metal, the policy of a general demonetization of one of the metals was first broached only about twenty years ago. About ten years later a formidable propaganda was organized to fasten that policy upon the commercial world.

This new school of financial theorists advocate the retention of metal as the material of money, but favor its subjection to governmental interference in every respect. Whenever new mines are discovered, or old ones yield or promise to yield more abundantly, instead of freely accepting their product in accordance with the automatic theory, they advocate its rejection through the restriction or the absolute prohibition of the coinage of either or both metals, or through the limitation or the abolition of the legal-tender function of one of them. Whenever the interests of the creditor and income classes seem to be in danger of being impaired by an increase in the volume and decrease in the value of money, or, in other words, by a general rise in prices, these modern theorists are clamorous in double-standard countries for the demonetization of one of the money metals, and in single-standard countries for the shifting of the money function from the metal which promises the most to the one that promises the least abundant supply. They are extremely anxious for the retention of the *material* of which the money-standard is composed when such material is rising in value, and prices are falling, and exceedingly apprehensive of the evil and inconvenience which they predict as sure to result from changing it. Whenever a fall in prices occurs, through either a natural or artificial contraction in the volume of money, they maintain that it is due to antecedent inflation and extravagance, or to overproduction through persistent and reckless industry. If the contraction be natural, that it cannot be helped, and if artificial, that though it may inflict great temporary losses on the masses of the people, it will be sure to result in their ultimate benefit, and they console the sufferers with the comforting assurance that such contraction is necessary in order to reach the lowest depths of that "*hard-pan*" whose foundations they have previously undermined by demonetizing one of the metals, and upon which alone they claim that money, capital, and labor can securely and harmoniously rest. But when the material composing the standard is falling in value and prices are rising, they immediately discover that the maintenance of the *value* of the standard is the all-important consideration, and that its material is of no importance whatever and should be at once changed to "*redress the situation.*" After having reduced one of the metals to a commodity by depriving it of the money function, these theorists complacently point to the resulting fluctuations in its value as a justification of the act producing them, and as a conclusive proof of the unfitness for money of the demonetized metal.

This system retains all that is mischievous in both of the other systems, and rejects all that is advantageous in either. Metallic money, on this theory, is no longer automatic, but is as completely subjected to governmental control for all injurious purposes as paper money. But, unlike paper money, the control over this kind of metallic money can only be exercised in the baneful direction of decreasing its volume, and thereby making property cheaper and money scarcer and dearer.

This is a one-sided system, which can operate only in the interest of the security creditor, the usurer, and pawnbroker, whom it enables, through the falling prices which itself occasions, to swallow up the shrunken resources of the debtor, but is impotent to protect the interests of the unsecured business creditor, the debtor, or society, when, from any cause, the supply of the money metals becomes deficient.

The world has expended a vast amount of labor in the production of the precious metals, and has made great sacrifices in upholding the automatic metallic system of money, and has a right to insist that it shall be consistently let alone to work out its own conclusions, or that it be abandoned.

If the world, or any considerable portion of it, should follow the teachings of this new school of economists and discard one metal and one-half of the automatic theory, it need not surprise them if the resulting financial and commercial disasters should teach and enforce the policy of discarding the other half of the theory and the other metal, and of establishing some system of money, however unscientific, under which all classes and interests could at least have an equal chance of protection.

THE DIFFERENT EFFECTS PRODUCED BY AN INCREASING, DECREASING, AND STEADY VOLUME OF MONEY.

Effects of an increasing volume of money.

Whenever gold and silver prices have become adjusted to a given stock of those metals, an increase of that stock, other things remaining unchanged, will cause a rise and a decrease will cause a fall in prices. But under such conditions other things never do remain unchanged. There are powerful causes, moral and material, which invariably operate, when money is increasing in volume, to moderate the rise in prices, and to intensify their fall when it is decreasing. Hence, the fall in prices caused by a decreasing volume of money would be much greater in degree than would be the rise caused by a proportionately increasing volume.

Whenever it becomes apparent that prices are rising and money falling in value in consequence of an increase of its volume, the greatest activity takes place in exchanges and productive enterprises. Every one becomes anxious to share in the advantages of rising markets. The inducement to hoard money is taken away, and consequently the disposition to hoard it ceases. Its circulation becomes exceedingly active, and for the very plain reason that there could be no motive for holding or hoarding money when it is falling in value, while there would be the strongest possible motive for exchanging it for property, or for the labor which creates property, when prices are rising. Under these circumstances labor comes into great demand and at remunerative wages. This results in not only increased production, but increased consumption. The wants and expenditures of laborers increase with their earnings. Large enterprises, safe and unsafe, are at such times inaugurated by eager adventurers, and as frequently as otherwise upon insufficient capital.

If, however, the volume of money should increase in undue proportion to the new demands for it so as to cause a continuous and persistent rise in prices, it would encourage gambling in prices instead of encouraging production, and would end in the destruction of that industry which it at first stimulated. Such would be the haste to convert money into property that the price of all forms of property would advance more rapidly than the wages of labor. The laborer, excited by the apparent increase in the value of everything, would soon become discontented with the slow accumulations of his increased wages. Using his surplus earnings as a basis of credit, which is readily extended upon small margins when prices are rising, he would leave the field of productive industry for the illusory but more inviting field of speculative venture.

An increasing volume of money sometimes needed, after long periods of prostration.

It may, however, be possible that when industry has been dwarfed, commerce paralyzed, and the spirit of enterprise crushed out by a long-continued shrinkage in the volume of money and falling prices, the stimulus of rising prices would be a necessary temporary treatment.

At the Christian era the metallic money of the Roman Empire amounted to $1,800,000,000. By the end of the fifteenth century it had shrunk to less than $200,000,000. During this period a most extraordinary and baleful change took place in the condition of the world. Population dwindled and commerce, arts, wealth, and freedom all disappeared. The people were reduced by poverty and misery to the most degraded conditions of serfdom and slavery. The disintegration of society was almost complete. The conditions of life were so hard, that individual selfishness was the only thing consistent with the instinct of self-preservation. All public spirit, all generous emotions, all the noble aspirations of man shriveled and disappeared as the volume of money shrunk and as prices fell.

History records no such disastrous transition as that from the Roman Empire to the Dark Ages. Various explanations have been given of this entire breaking down of the frame-work of society, but it was certainly coincident with a shrinkage in the volume of money, which was also without historical parallel. The crumbling of institutions kept even step and pace with the shrinkage in the stock of money and the falling of prices. All other attendant circumstances than these last have occurred in other historical periods unaccompanied and unfollowed by any such mighty disasters. It is a suggestive coincidence that the first glimmer of light only came with the invention of bills of exchange and paper substitutes, through which the scanty stock of the precious metals was increased in efficiency. But not less than the energizing influence of Potosi and all the argosies of treasure from the New World were needed to arouse the Old World from its comatose sleep, to quicken the torpid limbs of industry, and to plume the leaden wings of commerce. It needed the heroic treatment of rising prices to enable society to reunite its shattered links, to shake off the shackles of feudalism, to relight and uplift the almost extinguished torch of civilization. That the disasters of the Dark Ages were caused by decreasing money and falling prices, and that the recovery therefrom and the comparative prosperity which followed the discovery of America were due to an increasing supply of the precious metals and rising prices, will not seem surprising or unreasonable when the noble functions of money are considered. Money is the great instrument of association, the very fiber of social organism, the vitalizing force of industry, the protoplasm of civilization, and as essential to its existence as oxygen is to animal life. Without money civilization could not have had a beginning; with a diminishing supply it must languish, and, unless relieved, finally perish.

Symptoms of disasters similar to those which befell society during the Dark Ages were observable on every hand during the first half of this century. In 1809 the revolutionary troubles between Spain and her American colonies broke out. These troubles resulted in a great diminution in the production of the precious metals, which was quickly indicated by a fall in general prices. As already stated in this report, it is estimated that the purchasing-power of the precious metals increased between 1809 and 1848 fully 145 per cent., or, in other words, that the general range of prices was 60 per cent. lower in 1848 than it was in 1809. During this period there was no general demonetization of either metal and no important fluctuation in the relative value of the metals, and the supply was sufficient to keep their stock good against losses by accident and abrasion. But it was insufficient to keep the stock up to the proper correspondence with the increasing demand of advancing populations. The world has rarely passed through a more gloomy period than this one. Again do we find falling prices and misery and destitution inseparable companions. The poverty and distress of the industrial masses were intense and universal, and, since the discovery of the mines of America, without a parallel. In England the sufferings of the people found expression in demands upon Parliament for relief, in bread-riots, and in immense Chartist demonstrations. The military arm of the nation had to be strengthened to prevent the all-pervading discontent from ripening into open revolt. On the Continent the fires of revolution smoldered everywhere and blazed out at many points, threatening the overthrow of states and the subversion of social institutions.

Whenever and wherever the mutterings of discontent were hushed by the fear of increased standing armies, the foundations of society were honey-combed by powerful secret political associations. The cause at work to produce this state of things was so subtle, and its advance so silent, that the masses were entirely ignorant of its nature. They had come to regard money as an institution fixed and immovable in value, and when the price of property and the wages of labor fell, they charged the fault, not to the money, but to the property and the employer. They were taught that the mischief was the result of overproduction. Never having observed that overproduction was complained of only when the money stock was decreasing, their prejudices were aroused against labor-saving machinery. They were angered at capital, because it either declined altogether to embark in industrial enterprises or would only embark in them upon the condition of employing labor at the most scanty remuneration. They forgot that falling prices compelled capital to avoid such enterprises on any other condition, and for the most part to avoid them entirely. They did not comprehend that money in shrinking volume was the prolific parent of enforced idleness and poverty, and that falling prices divorced money, capital, and labor, but they none the less felt the paralyzing pressure of the shrinking metallic shroud that was closing around industry.

The increased yield of the Russian gold-fields in 1846 gave some relief and served as a parachute to the fall in prices, which might otherwise have resulted in a great catastrophe. But the enormous metallic supplies of California and Australia were all needed to give substantial and adequate relief. Great as these supplies were, their influence in raising prices was moderated and soon entirely arrested by the increasing populations and commerce which followed them. In the twenty-five years between 1850 and 1876 the money stock of the world was more than doubled, and yet at no time during this period was the general level of prices raised more than 18 per cent. above the general level in 1848. A comparison of this effect of an increasing volume of money after 1848 with the effect of a decreasing volume between 1809 and 1848, strikingly illustrates how largely different in degree is the influence upon prices of an increasing or decreasing volume of money. The decrease of the yield of the mines since about 1865, while population and commerce have been advancing, has already produced unmistakable symptoms of the same general distrust, non-employment of labor, and political and social disquiet, which have characterized all former periods of shrinking money.

Steadiness in the volume of money essential to prosperity.

It is in a volume of money keeping even pace with advancing population and commerce, and in the resulting steadiness of prices, that the wholesome nutriment of a healthy vitality is to be found. The highest moral, intellectual, and material development of nations is promoted by the use of money unchanging in its value. That kind of money, instead of being the oppressor, is one of the great instrumentalities of commerce and industry. It is as profitless as idle machinery, when it is idle; differing from all other useful agencies, it cannot benefit its owner except when he parts with it. It is only under steady prices that the production of wealth can reach its permanent maximum, and that its equitable distribution is possible. Steadiness in prices insures labor to all and exacts labor from all. It gives security to credit and stability and prosperity to business. It encourages large enterprises, requiring time for their development, and crowns with success well-matured and carefully-executed plans. It discourages purely speculative ventures, and especially those based upon disaster. It encourages actual transactions rather than gambling on future prices. It metes out justice to both debtor and creditor, and secures credit to those who deserve it. It prevents capital from oppressing labor and labor from oppressing capital, and secures to each its just share of the fruits of industry and enterprise. It secures a reasonable interest for its use to the lenders of money, and a just share in the profits of production to the borrower. It keeps up the distinction between a mortgage and a deed. It insures a moderate competence to the many rather than colossal fortunes to the few at the expense of the many.

It may be impossible to devise any system through which the volume of money shall always increase or decrease in corresponding ratio to the increase or decrease of all those things which it is its function to measure. If it be admitted that the volume of money should increase *pari passu* with either wealth, commerce, or population, the least measure of increase would be that based on population, as in commercial countries both wealth and exchanges are multiplied more rapidly than population. The narrower measure of increase would probably be the more accurate one, as the thing to be measured and which it is important should have an unvarying value is human effort, and as that can neither be increased nor diminished except through an increase or diminution of the population, it would seem that the volume of money should only vary with population.

As steadiness in prices, which depends on steadiness in the relation between money and all other things, is essential to prosperity, it follows that in any change in money-systems the volume of the new money, that is to say, the number of units of the new money issued, should if possible be neither greater nor less than the number of units in circulation at the time of the change. A strict observance of this rule, whatever may be the material of money, will prevent any general rise or fall in prices.

The quantity of metallic money, or of paper money constantly convertible into metallic money, which can be maintained in the circulation of any particular country cannot be controlled arbitrarily. It cannot be greater than such an amount as may be requisite to maintain the prices of such country at a substantial parity with the prices of all other countries using the same kind of money. Any change from this amount must be temporary, and will be soon automatically corrected by the course of exchange.

The volume of inconvertible paper money, on the contrary, is local to, and subject to the control of, the country issuing it, and should be regulated solely with reference to existing prices, and consequently should be neither increased nor diminished, except in correspondence with changes in population and commerce.

The proposition often made that the quantity of money in this country should amount now to as much *per capita* as it did at some anterior period, or to as much *per capita* as in England or France, rests on no philosophical basis whatever. Irrespective of time-contracts, it is of no consequence what the volume of money may be, provided it be subdivided into such number of units, or fractions of units, as would meet physical requirements, while the equity of such contracts can be met only by maintaining the relation between money and other things undisturbed.

Equally fanciful and erroneous is the proposition that the rates of interest for money can be lowered by increasing its quantity. It is prices, and not interest, which depend upon the volume of money. The rates for the use of loanable capital depend upon entirely different factors; such as the current rates of business profits, productiveness of the soil, the security of property, the stability of government, pressure of taxation, and the fiscal policies of governments, such as the maintenance of public debts, which necessarily increase the rate of interest. In truth, increasing the amount of money tends indirectly to increase the rate of interest by stimulating business activity, while decreasing the amount of money reduces the rate of interest by checking enterprises and thereby curtailing the demand for loans. This is signally illustrated by the present condition of things in every part of the commercial world. The rate of interest should be, and under a correct money system would be, merely an expression of the rate of profit which could be made through the use of borrowed capital.

Effects of a decreasing volume of money.

While the volume of money is decreasing, even although very slowly, the value of each unit of money is increasing in corresponding ratio, and property is falling in price. Those who have contracted to pay money find that it is constantly becoming more difficult to meet their engagements. The margins of securities melt rapidly away, and the confiscation by the creditor of the property on which they are based becomes only a question of time. All productive enterprises are discouraged and stagnate because the cost of producing commodities to-day will not be covered by the prices obtainable for them to-morrow. Exchanges become sluggish, because those who have money will not part with it for either property or services, beyond the requirements of actual current necessities, for the obvious reason that money alone is increasing in value, while everything else is declining in price. This results in the withdrawal of money from the channels of circulation, and its deposit in great hoards, where it can exert no influence on prices. This hoarding of money from the nature of things must continue and increase not only until the shrinkage of its volume has actually ceased, but until capitalists are entirely satisfied that money lying idle on special deposit will no longer afford them revenue, and that the lowest level of prices has been reached. It is this hoarding of money, when its volume shrinks, which causes a fall in prices greater than would be caused by the direct effect of a decrease in the stock of money. Money in shrinking volume becomes the paramount object of commerce instead of its beneficent instrument. Instead of mobilizing industry, it poisons and dries up its life-currents. It is the fruitful source of political and social disturbance. It foments strife between labor and other forms of capital, while itself hidden away in security gorges on both. It rewards close-fisted lenders and filches from and bankrupts enterprising borrowers. It circulates freely in the stock exchange but avoids the labor exchange. It has in all ages been the worst enemy with which society has had to contend.

The great and still continuing fall in prices in the United States has proved most disastrous to nearly every industrial enterprise. The bitter experience of the last few years has been an expensive but most thorough teacher. It has taught capitalists neither to invest in nor loan money on such enterprises, and just as thoroughly has it taught business men not to borrow for the purpose of inaugurating or prosecuting them. Of the few business enterprises now being successfully prosecuted, the larger part are based on a monopoly secured either by patents or exceptional conditions. The business man has discovered that the less active and enterprising he is the better he is off. The manufacturer avoids loss by damping down furnace-fires and slowing down machinery.

The mining companies would find profit in inactivity, and would probably suspend operations, were it not for the great loss they would sustain in doing so. Mines can be properly opened only through a great outlay of capital, which would be practically lost if they were closed down for any considerable period of time. The filling up with water, the caving in of galleries, the crushing in of shafts, the rusting of machinery, and the general disarrangement of their interior workings would require for their repair a not much less expenditure than was necessary for their original opening. Hoping for better times, they therefore struggle on against an adverse current, without profit and generally only without loss by reducing their miscellaneous expenditures to the lowest possible point and wages to a starvation level. The miners ascend from the dark and gloomy depths of the mine with their scanty pittance called wages, to find in a famishing household a gloom that is more profound. They await with heroic fortitude and a sometimes impatient hope the advent of another Sir Humphrey Davy, with a lamp capable of shedding light on the cause of existing evils, and of protecting them and all others who depend on their labor for their daily bread against a lingering misery more to be dreaded than the deathly danger that lurks in the treacherous fire-damp.

The stockholders of railroads have suffered a vast shrinkage in the value of their property and in the volume of their traffic and in rates of transportation, while their debts have remained nominally the same but really increasing. In order to make their decreased receipts meet the interest on their bonds, they are forced to reduce their operating expenses to the lowest possible point. Their struggles seem to be in vain, and unless that system can be changed which is making each dollar which they owe more valuable, and at the same time causing a shrinkage in their business, and which is chaining labor and all other forms of capital to the chariot-wheels of money-capital, they will, one after another, be swallowed by the bondholders. In the end the stockholders will be entirely out of the account, and the contest will be between different classes of bondholders, if that can be called a contest where victory is assured in advance to the liens which have priority.

Farmers whose lands are not mortgaged, and their employés who at least are insured against absolute want, best escape the evils of the times, but the prices of agricultural products must finally decline with the reduction in the number and means of the consumers. The tendency of falling prices is to break down the vast diversified interests of the country, and to force a constantly-increasing proportion of the population into the one single primitive industry of cultivating the soil. The United States, instead of continuing a highly commercial and manufacturing nation, will, until falling prices are checked, become more and more exclusively agricultural and pastoral.

Securities have already become so impaired through falling prices that loanable capital has fled affrighted from the newer and more sparsely settled sections of the country and accumulated in large amounts in the great financial centers where securities are more ample. The personal and property securities of individuals have generally ceased to be available, except at the highest rates of interest, or at ruinously low valuations. Money can be borrowed readily only upon such securities as bonds which are based on the unlimited tax-levying power of the Government, or upon the bonds and stocks of first-class trunk-lines of railroad corporations, whose freight and fare rates are practically a tax upon the entire population and resources of the regions which they traverse and supply. The competition among capitalists to loan money on these more ample securities has become very keen, and such securities command money at unprecedentedly low rates. These low and lowering rates of interest, instead of denoting financial strength and industrial prosperity, are a gauge of increasing prostration. Large accumulations of money in financial centers, instead of being caused by the overflow of a healthful circulation, or even a proof of a sufficient circulation, are unmistakable evidence of a congested condition, caused by a decreasing and insufficient circulation. The readiness with which Government bonds bearing a very low rate of interest are taken, instead of showing that the credit of the Government has improved, is melancholy evidence of the prostrated condition to which industry and trade have been reduced. There need be no haste in refunding the public debt at the rates now proposed and considered low. Unless the progress of the commercial world in the policy of contracting money by demonetizing silver is checked, bonds bearing a much lower rate of interest than any yet offered will be gladly accepted by capitalists here and in Europe. When the money stock is diminishing and prices are falling, the lender not only receives interest, but finds a profit in the greatly increased value of the principal when it is returned to him. A loan of money made in 1809, if repaid in 1848, would have been repaid with an addition of 145 per cent. in the purchasing power of principal and interest, besides all the interest paid. Those who have loaned money to this Government since 1861 have already received nearly as much in the increased value of their principal as in interest, and all the probabilities are, in respect to the four per cent. thirty-year national bonds now being negotiated, if they are redeemed in gold, that more profit will be made by the augmentation in the value of principal than through interest. Indeed, the signs of the times are, that the bonds of a country possessing the unbounded resources and stable institutions of the United States, payable in gold at the end of thirty years without any interest whatever, would, through the increase of the value of that metal, prove a most profitable investment.

Effects of a shrinking volume of money on productive industry.

The worst effect, however, economically considered, of falling prices, is not upon existing property nor upon debtors, evil as it is, but upon laborers whom it deprives of employment and consigns to poverty, and upon society, which it deprives of that vast sum of wealth which resides potentially in the vigorous arms of the idle workman. A shrinking volume of money transfers existing property unjustly, and causes a concentration and diminution of wealth. It also impairs the value of existing property by eliminating from it that important element of value conferred upon it by the skill, energy, and care of the debtors from whom it is wrested. But it does not destroy any existing property, while it does absolutely annihilate all the values producible by the labor which it condemns to idleness. The estimate is not an extravagant one that there are now in the United States three million persons willing to work, but who are idle because they cannot obtain employment.

This vast poverty-stricken army is increasing and will continue to increase as long as falling prices shall continue to separate money capital, the fund out of which wages is paid, from labor, and to discourage its investment in other forms of property.

Money capital, labor, and other forms of capital are the warp and woof of the economical system. Labor, co-operating with the forces of nature, is the source of all wealth, and to reach the highest degree of effectiveness, it must be classified through the aid of capital and supported by capital during the process of production and be measured and paid in money, each unit of which is a sight-draft on all other forms of property, bearing a value in proportion to the number of such drafts. In order that any country may reach the maximum of material prosperity, certaid conditions are indispensable. All its labor, assisted by the most approven machinery and appliances, must be employed, and the fruits of industry must be justly distributed. These conditions are only possible when capital is absolutely protected against violence and free from illegitimate legislative interference, and when the laborer is protected in his natural right to dispose of his labor in such manner as he may prefer. They are utterly impossible when the money-stock is shrinking and the money-value of property and services is declining. Howsoever great the natural resources of a country may be, however genial its climate, fertile its soil, ingenious, enterprising, and industrious its inhabitants, or free its institutions, if the volume of money is shrinking and prices are falling, its merchants will be overwhelmed with bankruptcy, its industries will be paralyzed, and destitution and distress will prevail.

The instinct of self-interest is the mainspring of industrial and commercial activity. It is the animating motive alike of the capitalist and of the laborer. Without it, no labor would be performed, nor would capital have an existence. If money capital is withdrawn from productive enterprises, it is from the apprehension of loss and from the same instinct of thrift through which it was acquired. It is natural that the money capitalist should exact from labor all he can in exchange for his money, and that the laborer should exact all the money he can in exchange for his labor. What is known as the conflict between capital and labor, is not so much a conflict between other forms of capital and labor as it is between money and labor. Indeed, the conflict between money and other forms of capital is as distinctly marked and quite as severe as the conflict between money and labor, and in that conflict other forms of capital suffer fully as much as labor, the only difference being that they are better able to endure losses. Other forms of capital must be constantly converted into money in order to pay wages and to meet other demands incident to industrial enterprises. When the stock of money is shrinking and prices are falling, this conversion can only be made at rates continually growing more unfavorable, while at the same time the products of the labor for whose wages sacrifices have been made are also undergoing a shrinkage of money-value. Thus loss and sacrifice are encountered at every turn, and the owners of other capital than money shrink from the friction of exchange, withdraw from productive enterprises, and only exchange as much of their property for money as will suffice to meet the necessary expenditures of living, which are reduced to the most economical level, as it is principal and not income which is being consumed. Little more labor will be employed under these circumstances than is sufficient to support the owners of capital on this parsimonious basis, and as a consequence the labor market will be overstocked, and the competition between laborers will reduce wages to a starvation level. But during this period, when property is being sacrificed to meet current necessities, and laborers are being remitted to idleness and destitution, money fattens on the general disaster. Under any money-system whatever, labor, money, and other forms of capital confront each other as opposing forces, each seeking through a natural instinct to secure as much as possible of the others in exchange. These forces, although always operating against, are not necessarily inimical to or destructive of each other. On the contrary, under a just money-system, they are not even harmful to each other. The conflict between them is essential to the proper adjustment and harmonious working of all parts of the economical machinery. They are the centripetal and centrifugal forces of the industrial system. The equilibrium of all things is maintained through counterbalances. It is out of the action and counteraction of antagonistic forces that the harmonies of the universe are evolved. But under an unjust money-system, under a system which through law or accident fails to regulate the quantity of money so as to preserve the equilibrium between money and the other factors of production, the conflict between money and labor and other forms of capital becomes destructive and ruinous. It is in the shadow of a shrinking volume of money that disorders social and political gender and fester, that communism organizes, that riots threaten and destroy, that labor starves, that capitalists conspire and workmen combine, and that the revenues of governments are dissipated in the employment of laborers, or in the maintenance of increased standing armies to overawe them. The peaceful conflict which under a just money-system is continually waged between money capital and labor, and which tends only to secure the rights of each, and is essential to the progress of society, is changed under a shrinking volume of money to an unrelenting war, threatening the destruction of both. Money, in either shrinking or unduly increasing volume, like a dissolving chemical, separates capital from labor. It is not against capital, but against the false financial system that permits the volume of money to either shrink or unduly increase, that the hostility of society should be aroused. Let labor and capital be put on equal terms, so that idle capital will be as unfruitful as idle labor, and the conflict between them will cease to be destructive. An unjust money-system produces an unnatural relation between labor, capital, and money, and the resulting evils cannot be remedied by special legislation on particular cases, nor by general legislation abridging the natural rights of either. Such legislation would be futile and impertinent, destructive of that freedom of individual action so essential to progress, and subversive of the true interests of all classes of society, and would powerfully tend to the overthrow of free institutions. The equitable adjustment of the correlative demands of capital and labor cannot be made through violence, and is utterly impossible through any legal or other contrivance, under any system that permits contraction or undue expansion of that great instrument which measures alike the property of the capitalist and the labor of the workman. It is only through the action and counteraction of the antagonistic forces of capital and labor, automatically operating under a just money-system, that equity and harmony can be evolved.

The very same reasons which make capitalists refuse to exchange money, whose command over property is increasing, for property, whose command over money is decreasing, also make them refuse to exchange it for labor for the production of property. In a commercial sense, industrial enterprises are never undertaken nor carried on, except with the hope and expectation of gain. This expectation, unless under exceptional conditions, falling markets destroy. While capitalists, for these reasons, cannot afford to invest money in productive enterprises, still less can anybody afford to borrow money for such investments at any rate of interest, however low, and but little money is being now borrowed, except for purely speculative ventures, or to supply personal and family wants, or to renew old obligations. Money withdrawn from circulation and hoarded in consequence of falling prices, although neither paying wages, nor serving to exchange the fruits of industry, nor performing any of the true functions of money, is nevertheless not unproductive. It may not be earning interest, but it is enriching its owner through an increase of its own value, and that, too, without risk, and at the expense of society. If this were not the case, and if money were, while idle, losing a little in value instead of gaining, or if it simply held its own, it would be constantly diminished to the extent of the necessary expenditures of its owners who, under such conditions would be impelled by every instinct of thrift to seek for revenue through its employment in productive enterprises. The peculiar effect of a contraction in the volume of money is to give profit to the owners of unemployed money, through the appreciation of its purchasing power, by the mere lapse of time. It is falling prices that robs labor of employment and precipitates a conflict between it and money capital, and it is the appreciating effect which a shrinkage in the volume of money has on the value of money that renders the contest an unequal one, and gives to money capital the decisive advantage over labor and over other forms of capital invested in industrial enterprises. Idle machinery and industrial appliances of all kinds, instead of being productive of profit, are a source of loss. They constantly deteriorate through rust and waste. They cannot escape the assessor and tax-gatherer, as the bulk of money does, and must pay extra insurance when idle. Labor, unlike money, cannot be hoarded. The day's labor unperformed is so much capital lost forever to the laborer and to society. It being his only capital, his only means of existence, the laborer cannot wait on better times for better wages. Absolute necessity forces him to dispose of it on any terms which the owners of money may dictate. These are the conditions which surround the laborer throughout the commercial world to-day. The labor of the past is enslaving the labor of the present. At least that portion of the labor of the past which has been crystallized into money is enabled through a shrinkage of its volume and while lying idle in the hands of its owners to increase its command over present labor and over all forms of property and to transform vast numbers of honest and industrious workmen into tramps and beggars. These laborers must make their wants conform to their diminished earnings. They must content themselves with such things as are absolutely essential to their existence. Consumption is therefore constantly shrinking toward such limits as urgent necessities require. Production, which must be confined to the limits indicated by consumption, is constantly tending toward its minimum, whereas its appliances, built up under more favorable conditions, are sufficient to supply the maximum of consumption. Thus idle labor, idle money, idle machinery, and idle capital stand facing each other, and the stagnation spreads wider and wider. The future affords no hope or prospect of improvement, except through a change in financial policies. Prices have been persistently falling throughout the world since 1873, and as fast and as far in specie-paying countries as elsewhere. If the policy of chaining the industry and commerce of the world to a single metal be persisted in by the United States, Germany, and the other European countries acting in concert with them, money must still rise in value, and prices must continue to fall. The depression in productive industry will become more deathly, and the number of idle laborers will indefinitely multiply. The loss which this country sustains by reason of the enforced idleness of three million persons who, although idle, must still in some scanty way be supplied with food, clothing, and shelter, is in the aggregate very great. If it be estimated at one dollar per day for each laborer, it would amount in two years to a sum sufficient to discharge the national debt. It would pay the interest, at five per cent. per annum, on eighteen thousand million dollars. It would be a sum more than sufficient to supply anew each year the circulating medium of the country. It would amount, in four years, to a greater sum than the world's entire gold product has amounted to in the last fifty prolific years. It would aggregate in ten years a value far greater than the value of the world's entire product of both gold and silver for the last hundred years. It would amount in four years to a sum more than sufficient to duplicate and stock every mile of railroad now in the United States. Contrasted with the startling sum thus annually lost through the shrinkage of money and falling prices, the amount which could by any possibility be lost in a generation through fluctuations in the relative values of gold, silver, and paper, would weigh as mere dust in the balance. If to this loss be added that caused by the non-employment of productive machinery and appliances, the aggregate becomes appalling. The average stocks of nearly all commodities are at no time sufficient for more than a few months' consumption. Without constant reproduction mankind would soon be stripped of all their movable possessions. No more fatal blow, therefore, could be directed against the economical machinery of civilized life than one against labor, and that blow can be most effectively delivered through a policy which strikes down prices. If all debts in this country had been doubled by an act of legislation, it would have been a far less calamity to the debtor and to the country than the increase in their real burden already caused by a contraction in the volume of money. And infinitely more disastrous in every sense than an unjust increase in the burden of debt is the universal stagnation of industry and commerce resulting from the same cause. The doubling of debts would have left the productive forces unimpaired, while falling prices are sapping them insidiously and fatally. Nations have often exhibited an astonishing capacity for sustaining and repairing the destruction of great and protracted wars. The explanation of this will be found in the fact that their productive forces have at such times continued vigorous and active. Armies in barracks and on parade are as essentially non-producers as when actively engaged, and a considerable proportion of the additions made to armies in times of war are recruited from the ranks of non-producers. England was never more prosperous than during the Napoleonic wars. The Northern and Western States of this Union were never more prosperous than during the civil war, and for some time afterward. So long as all the productive forces are active almost any burden can be borne. The debts of the country, great as they are, would scarcely weigh as a feather if all its labor were employed. Indeed, this country could better afford, in an economical view, to support one million of soldiers in the field, than to support its present army of three millions that falling prices have conscripted into the ranks of non-producers.

Authority emphasizes what experience teaches.

All respectable authorities agree as to the relative effects of an increasing and decreasing money. Several of them are presented, the earliest in point of time being the following, from David Hume's Essay on Money:

> It is certain that since the discovery of the mines in America industry has increased in all the nations of Europe. * * We find that in every kingdom into which money begins to flow in greater abundance than formerly, everything takes a new face; labor and industry gain life; the merchant becomes more enterprising, the manufacturer more diligent and skillful, and even the farmer follows his plow with greater alacrity and attention. * * * It is of no manner of consequence with regard to the domestic happiness of a state whether money be in a greater or less quantity. The good policy of the magistrate consists only in keeping it, if possible, still increasing; because by that means he keeps alive a spirit of industry in the nation and increases the stock of labor, in which consists all real power and riches. A nation whose money decreases is actually at that time weaker and more miserable than another nation which possesses no more money, but is on the increasing hand.

Alexander Hamilton, in his report (1791) on the mint, says:

> To annul the use of either of the metals as money is to abridge the quantity of circulating medium, and is liable to all the objections which arise from a comparison of the benefits of a full with the evils of a scanty circulation.

Thomas Jefferson, in a letter to Mr. Hamilton, (February, 1792,) says:

> I concur with you that the unit must stand on both metals.

William H. Crawford, Secretary of the Treasury, in a report (February 12, 1820) to Congress, says:

> All intelligent writers on currency agree that when it is decreasing in amount, poverty and misery must prevail.

Mr. R. M. T. Hunter, in a report (1852) to the United States Senate, says:

> Of all the great effects produced upon human society by the discovery of America, there were probably none so marked as those brought about by the great influx of the precious metals from the New World to the Old. European industry had been declining under the decreasing stock of the precious metals, and an appreciating standard of values; human ingenuity grew dull under the paralyzing influences of declining profits, and capital absorbed nearly all that should have been divided between it and labor. But an increase in the precious metals, in such quantity as to check this tendency, operated as a new motive-power to the machinery of commerce. Production was stimulated by finding the advantages of a change in the standard on its side. Instead of being repressed by having to pay more than it had stipulated for the use of capital, it was stimulated by paying less. Capital, too, was benefited, for new demands were created for it by the new uses which a general movement in industrial pursuits had developed; so that if it lost a little by a change in the standard, it gained much more in the greater demand for its use, which added to its capacity for reproduction, and to its real value.
>
> The mischief would be great, indeed, if all the world were to adopt but one of the precious metals as the standard of value. To adopt gold alone would diminish the specie currency more than one-half; and the reduction the other way, should silver be taken as the only standard, would be large enough to prove highly disastrous to the human race.

The Encyclopædia Britannica, 1859, (article Precious Metals, by J. R. McCulloch,) says:

> A fall in the value of the precious metals, caused by the greater facility of their production, or by the discovery of new sources of supply, depends in no degree on the theories of philosophers, or the decisions of statesmen or legislators, but is the result of circumstances beyond human control; and although, like a fall of rain after a long course of dry weather, it may be prejudicial to certain classes, it is beneficial to an incomparably greater number, including all who are engaged in industrial pursuits, and is, speaking generally, of great public or national advantage.

Ernest Seyd, 1868, (Bullion, page 613,) says:

> Upon this one point all authorities on the subject are agreed, to wit, that the large increase in the supply of gold has given a universal impetus to trade, commerce, and industry, and to general social development and progress.

The American Review (1876) says:

> Diminishing money and falling prices are not only oppressive upon debtors, of whom, in modern times, states are the greatest, but they cause stagnation in business, reduced production, and enforced idleness. Falling markets annihilate profits, and as it is only the expectation of gain which stimulates the investment of capital in opera-

tions, inadequate employment is found for labor, and those who are employed can only be so upon the condition of diminished wages. An increasing amount of money, and consequently augmenting prices, are attended by results precisely the contrary. Production is stimulated by the profits resulting from advancing prices; labor is consequently in demand and better paid, and the general activity and buoyancy insure to capital a wider demand and higher remuneration.

Leon Fauchet, (1843,) in Researches upon Gold and Silver, says:

> If all the nations of Europe adopted the system of Great Britain, the price of gold would be raised beyond measure, and we should see produced in Europe a result lamentable enough.

Before a French monetary convention in 1869 testimony was given by the late M. Wolowski, by Baron Rothschild, and by M. Rouland, governor of the Bank of France.

M. Wolowski said:

> The sum total of the precious metals is reckoned at fifty milliards, one-half gold and one-half silver. If, by a stroke of the pen, they suppress one of these metals in the monetary service, they double the demand for the other metal, to the ruin of all debtors.

M. Rouland, governor of the Bank of France, said:

> We have not to do with ideal theories. The two moneys have actually co-existed since the origin of human society. They co-exist because the two together are necessary, by their quantity, to meet the needs of circulation. This necessity of the two metals, has it ceased to exist? Is it established that the quantity of actual and prospective gold is such that we can now renounce the use of silver without disaster?

Baron Rothschild said:

> The simultaneous employment of the two precious metals is satisfactory and gives rise to no complaint. Whether gold or silver dominates for the time being, it is always true that the two metals concur together in forming the monetary circulation of the world, and it is the general mass of the two metals combined which serves as the measure of the value of things. The suppression of silver would amount to a veritable destruction of values without any compensation.

At the session (October 30, 1873) of the Belgian Monetary Commission, Professor Laveleye said:

> Debtors, and among them the state, have the right to pay in gold or silver, and this right cannot be taken away without disturbing the relation of debtors and creditors, to the prejudice of debtors, to the extent of perhaps one-half, certainly of one-third. To increase all debts at a blow, (*brusquement*,) is a measure so violent, so revolutionary, that I cannot believe that the government will propose it, or that the Chambers will vote it.

The contrast presented by these authorities between the effects of an increasing and decreasing volume of money shows that if a change in the one direction or the other is unavoidable, a change in the direction of increase is the most desirable. Undoubtedly the best condition upon the whole is that of steadiness, or only such an increase of money as would correspond with the advance of population. But with the history before us of thirty centuries of mining, we know that an injurious and excessive increase of metallic money has never occurred. We may feel assured that it never can occur, because the enlargement of commercial exchanges, which results from an increase of money, speedily restores the equilibrium. The danger of an unduly increasing money is theoretical and fanciful. The mischief which practically threatens the world, and which has been the most prolific cause of the social, political, and industrial ills which have afflicted it, is that of a decreasing and deficient money. It is from such a deficiency that mankind are now suffering, and it is the actual and present evil with which we have to deal.

A single standard ruinous to debtors.—Magnitude of public and private debts.

All debts must at last be paid through exaction from labor, and the real pressure of debts is measured by the prices of the commodities which debtors must sell in order to make payment. It is thus that the volume of the precious metals determines the real pressure of debts by determining the prices of commodities. There is a partial exception to this in the case of the domestic debts of countries in which inconvertible paper is made money by force of law. But such paper will liquidate neither the individual nor corporate debts of such countries which are payable abroad, nor, with rare and unimportant exceptions, will it liquidate their national debts. It is sometimes said that these debts are, in fact, discharged, not in gold and silver, but in exported products; but this in no degree affects the case, as they must be discharged in products at prices determined by the volume of gold and silver.

If the proportions of silver and gold in the money of the world be assumed to be equal, the total discarding of either metal would diminish the amount of money one-half and double the pressure of debts. It would do more than that while the process of diminution was going on, and for some time afterward. The proportions of such a calamity as that cannot be exaggerated.

The Westminster Review for January, 1876, estimated that the national debts of the world then aggregated £4,598,000,000, or $22,204,000,000.

Our national debt is about $2,000,000,000.

Some other public and corporate debts have been computed by careful authorities as follows:

States	$390,000,000
Cities, towns, and counties	850,000,000
Railroads	2,459,000,000
Canals	105,000,000
Total	3,804,000,000

The figures for railroad debts are taken from Poor's Manual, 1876–'77. Of debts of manufacturing, mining, and other companies, no estimates have ever been attempted.

Of another form of permanent debt in this country, that of mortgages upon real estate, it can only be said that it is exceedingly great.

The permanent investments of the national, State, and savings banks, insurance companies, and trust companies of New York City amounted at the commencement of the present year to about $500,000,000. These investments include $205,000,000 in real-estate mortgages. According to the most recent returns from savings banks which are accessible, those in the six New England States, having $438,000,000 in deposits, had invested $228,000,000, or rather more than one-half, in real-estate mortgages; those in the State of New York, having $316,677,000 in deposits, had invested $116,154,000 in the same way; and of those in New Jersey, 45 per cent. of the deposits are so invested.

It may be fairly inferred from these statements that the aggregate value of real-estate mortgages held by moneyed institutions is very large. The value of those held by individuals must be still larger. The loans and discounts of the national banks October 2, 1876, were $927,000,000. In November, 1875, the capital of State and private banks was $209,000,000, not reckoning a large surplus, and $487,000,000 of deposits, and the savings banks had $884,000,000 of deposits. Nearly the whole of this vast aggregate must have been employed in loans of some kind. A considerable proportion of the farms in the West, especially in the newer States, are known to be mortgaged. Of the 630,099 traders and manufacturers on the books of the mercantile agency of Dunn, Barlow & Co., in 1876, 9,022 failed, with average liabilities of $21,020. If that is assumed to be the average liability of the whole 630,099, the aggregate liability would be $13,244,000,000. Those who think that the failures should be ascribed, not to a relative deficiency of assets, but to an excess of debts above the average, will reduce this estimate. But it is also to be taken into the account that the books of this agency do not contain the names of all the persons described as traders and manufacturers, nor of a vast number not described as such that are large operators and debtors.

There are other forms of debt in this country, which consist of the rents reserved on long leases of either land and buildings, or land alone to be built upon by the lessees. The amount of this kind of indebtedness in the larger cities is enormous, and the effect upon it of a shrinking money is especially ruinous. The prostration of business, which destroys or greatly reduces the value of buildings hired for commercial or manufacturing purposes, does not affect the right of the landlord to exact in full the stipulated rent. The source from which it was expected to be paid may be dried up, but the liability to pay it remains undiminished. Indebtedness under long leases figures largely in the lists of debts scheduled in bankrupt courts, and largely also among the losses of those who have so far managed to keep out of such courts.

Poor's Manual states the share-capital of the railroads at $2,198,000,000, and their debts at $2,459,000,000, being a proportion of share-capital to debt of eighty-nine to one hundred. This shows a considerable excess of debt over capital stock. The financial condition of the railroads illustrates the condition of a large proportion of the corporate and individual property in the United States. The country is new and unsurpassed in natural resources, the population venturesome, ingenious, and industrious, and enterprises of all kinds, from the greatest to the smallest, are undertaken by corporations and individuals on small capital. It is considered prudent for companies or individuals to undertake operations with only means enough of their own to constitute a security for loans wherewith to complete them. This view of what is prudent may or may not be well taken, but it is natural to a young and progressive people. It has made the American economical system one vast net-work of debts and credits, and of long debts and long credits. Merchants and traders, whose bills receivable balance their bills payable, may easily make the mistake that an increase in the value of money is of little consequence, and that what is lost on one hand will be gained on the other. But this is a delusion, as they will find that, while they lose by the bankruptcy of debtors, caused by a diminishing and appreciating money, they will be obliged to pay in full the debts which they themselves owe. But these short commercial debts, where bills payable and bills receivable balance each other, do not represent in amount or character the most burdensome forms of the indebtedness of the country. Our cities are largely built up on long loans, and this is equally true of the rural regions. Men often commence to farm with little else than their hands and their courage, generally with only some inadequate accumulation for a first crop. They buy their lands principally on credit, and get the means for improvement on credit. Debt and credit run through all the ramifications of permanent investment in the United States. Even church edifices do not escape mortgages. Two years ago the Stockholder, one of the financial journals of New York, stated it to be the opinion of well-informed persons that of the lots on Manhattan Island, computed at 156,000, improved and unimproved, three-fourths were mortgaged. This may be too high an estimate, and it may be the case that property is mortgaged to a greater extent in New York City than in other portions of the country. But there can be no doubt that on the lowest estimates the mortgage-debts of the country aggregate a vast and startling amount.

The question of preserving steadiness in the value of money, and consequently in the prices of property, and especially of guarding against a change in the direction of contracting the volume and appreciating the value of money, is, therefore, the transcendently important one in the discussion of the policy of demonetizing silver.

It is a mistake, although a very common one, to suppose that the Paris conference of 1867 recommended the demonetization of silver and the adoption of an exclusive gold standard. What it did recommend was such a unification of the gold coins of the leading commercial nations as would render them convenient for international use. The practical measure proposed was that the British pound sterling should be reduced to twenty-five francs and the American eagle to fifty francs. The demonetization of silver formed no part of the policy proposed. The only recommendation on that point was, that nations having the double standard should agree to establish such a legal relation of value between the two metals as would not practically exclude the circulation of gold. This recommendation was embodied in the following resolution:

> The advantage of international use which will be acquired by coins of the metal selected as a common standard will not of itself be a sufficient guarantee for the maintenance of their circulation in each nation, but it will also be necessary to be further stipulated, by nations now having the single standard of silver and by the nations which have the double standard, that the relation of the value of the two metals shall not be so fixed as to prevent the circulation of gold.

After a long discussion, this resolution was adopted unanimously. The representatives of two nations (Prussia and the United States) declined to vote, and the latter (Mr. Ruggles) for the express reason that it recognized the continuance of the double standard, to which he was opposed.

It will thus be seen that the action of Germany in 1871 was in no respect conformable to the recommendations of the Paris conference. Germany, in demonetizing silver, did what that conference did not recommend, and in refusing to adapt its coinage to international use, did not do what that conference did recommend.

It is, therefore, not the Paris conference of 1867, but the legislation of Germany of 1873, which compels a review of the grounds upon which gold and silver have always and almost universally been regarded as equally money-metals, and a consideration of the policy and the consequences of abandoning the monetary use of one of them. No question more vitally affecting the interests and happiness of the human race has ever claimed discussion and decision. It is no such question as was supposed to exist twenty years ago, when the anticipations of the Californian and Australian yield were so exaggerated beyond the actual event as to create a belief, more or less extensive, that the stability of the standard of values required the demonetization of one of the metals. The yield of the two metals since 1848 has not, upon the whole, raised the prices of commodities much, if at all, and this yield, instead of increasing, has been for several years rather decreasing. The danger which menaces is, therefore, not a plethora, but a scarcity of money, even if both metals are retained as such. But with the demonetization of one of them we should witness a contraction and scarcity of money and fall in prices which, in magnitude and suddenness combined, has no precedent in the history of the world, and in respect to the consequences of which we have no adequate experience to guide us. The money-stocks of the world were diminished after the overthrow of Roman civilization, but only by the slow process of current supplies falling below current consumption and loss. But the general demonetization of either metal, if carried into immediate effect, would destroy at one blow one-half the money of the world.

The demonetization of silver in a single country, or even in several countries, so long as silver retains a substantial position in the monetary circulation of the world, would produce effects short, of course, of those which would follow its universal demonetization. But to act upon the assumption that silver could maintain such a position, if the United States should finally discard it, would be taking reckless chances in a matter too momentous to be subjected to any avoidable risk.

A single standard eventually ruinous to creditors.

It is obvious that a violent contraction in the volume of money would prove disastrous to all classes of debtors, including nations. This would be its first effect, its more immediate result. But that it would eventuate in great injury and loss to the creditor classes, is not less certain. The cases are isolated and exceptional in which creditors are secured by pledges so ample as to be absolutely insured against loss even when the depreciation of prices is moderate. Their losses would become enormous in such a depreciation of prices as would result from contracting metallic money one-half. In the general wreck which would follow such a contraction, debtors and creditors would be engulfed in one common ruin.

As to many debts, specific pledges do not exist, as in the conspicuous case of national debts, swollen already to such incredible proportions and still increasing. The English, who, from their pre-eminence in accumulated capital, own so large a proportion of these debts, do not conceal their anxieties in respect of this danger.

The Westminster Review (January, 1876) holds that no rise in the prices of commodities has resulted from the increase of gold since 1848, and that the tendency in that direction has been at least neutralized by "the increase of general population and wealth, *the demonetization of silver, and the establishment of gold currencies in its stead in several states.*" And upon the effect of further movements in the direction of demonetizing silver, it says:

> One of the things involved we hold to be the probable appreciation of gold; in other words, an increase of its purchasing power; and that, consequently, unless fresh discoveries are made, prices have seen their highest for many a long day, and that debts contracted in gold will, by reason of this movement, tend to press more heavily on the borrowers, and *that it will be well if this pressure do not become so intolerable as to suggest, by way of solution, something like universal repudiation.*

In letters published within a few months, the president of the Liverpool (England) Chamber of Commerce says of silver demonetization:

> It will practically beggar all nations that have borrowed in silver and have to pay in gold.
>
> No doubt, if such a state of things were to happen, some countries would have to pass into liquidation and make a composition with their creditors, and ultimately matters would settle down everywhere, after excessive suffering and confusion, into a universal system of gold payments; but the necessary result would be that the metallic basis on which the business of the world was done would be immensely reduced. It would be as if the mines were shut up for several years. Instead of, say, 1,400 millions [sterling] of gold and silver to do the business of exchange, there would be 700 or 800 millions [sterling] of gold, and a limited amount of silver as small change. Money values would fall greatly; national debts, like our own, would press much more heavily, and a period of suffering and contraction of business would ensue, similar to what the United States has experienced on coming painfully back from inflated paper toward specie payments. No doubt at last the process would be accomplished, and

after a century or so the world could trade as well on gold alone as gold and silver combined. But why have the intermediate chaos if it can be avoided?

It was this same view which induced the London Economist, the special organ of British financial opinion, to advise (September 2, 1876) this country to adopt either the double standard or a single standard of silver. It then said:

> The United States might take the single gold standard like ourselves, and this is what, till very lately, every English economist would have advised them to do. *The evils of this plan had not then been seen.*

And, after pointing out that in the event of the adoption of a gold standard by France and the United States, "*the money-markets of the world would be straitened*," the Economist continued:

> At the present moment America would become a silver country, and the interest and principal of her obligations would be paid in silver. The evil, of course, would not be what the momentary circumstances of the market would now suggest. Silver would not be at 52 pence per ounce if America was a country with a sole silver currency. So large a demand as her coin requirements would send up the price very rapidly—perhaps to its old amount.

It is quite apparent that the wiser creditor nations are beginning to see that they would inevitably lose more than they could possibly gain by such a contraction in the volume and consequent appreciation in the value of money as would drive their debtors to bankruptcy and ruin. They will see it more clearly hereafter, if the demonetization of silver is persisted in. This country, with its vast extent of unoccupied fertile territory, its almost boundless resources, its ingenious, enterprising, industrious, and increasing population, its comparative immunity from the danger of foreign wars, its free institutions, and its stable government, would perhaps be able to sustain any burden thrown upon it by an unwise and unjust policy. But it must be remembered that these favorable conditions do not exist everywhere, and that less favored debtor nations would sink under a load which this country might be strong enough to carry.

IV.

UNDER THE ACTUAL CIRCUMSTANCES OF THE MOVEMENTS IN OTHER COUNTRIES, IN THE DIRECTION OF DEMONETIZING SILVER, IS IT PRACTICABLE FOR THE UNITED STATES TO MAINTAIN THE DOUBLE STANDARD?

It is said that the policies of other countries which we cannot control are giving to silver a tendency to such a degree of depreciation and fluctuation as would unfit it for monetary use, and that it is not in our power to resist this tendency by remonetizing silver ourselves.

The following is a statement of different nations, not including the United States, with their estimated populations, classified according to their metallic standards:

SILVER-STANDARD COUNTRIES.

	Population.
Russia	76,000,000
Austria	36,000,000
Egypt	4,500,000
Mexico	8,000,000
Central America	2,600,000
Ecuador	1,300,000
Peru	3,400,000
China	400,000,000
British India	237,144,456
	768,944,456

As Russia and Austria both have legal-tender paper money, their population will be *non-effective* in relation to the matter in hand, until they resume specie payments, or commence to hoard specie with a view to such payments. With that deduction, the population actually using the silver standard is 656,944,456.

DOUBLE-STANDARD COUNTRIES.

	Population.
Greece	1,400,000
Roumania	4,000,000
Colombia	2,900,000
Venezuela	1,600,000
Chili	1,900,000
Uruguay	400,000
Paraguay	1,200,000
Japan	33,000,000
Holland	3,700,000
France	36,200,000
Belgium	5,100,000
Switzerland	2 700,000
Italy	26,800,000
Spain	16,400,000
	137,300,000

As Italy has not only a legal-tender paper money, but substantially no metallic money in circulation, its population may be set down as *non-effective*, thus reducing the population of this group to 110,500,000. In Holland, France, Belgium, Switzerland, and Spain, containing a population of 64,100,000, the coinage of silver is either limited or entirely suspended.

GOLD-STANDARD COUNTRIES.

	Population.
Great Britain	32,000,000
Canada, Cape of Good Hope, and Australian colonies	7,000,000
Germany	42,000,000
Norway	1,700,000
Sweden	4,300,000
Denmark	1,800,000
Portugal	4,000,000
	92,800,000

This classification excludes Brazil, the Argentine Republic, Turkey, Persia, the great bulk of Africa, and some minor countries and colonial possessions in Asia.

Brazil and the Argentine Republic have the gold standard nominally, but the actual currency is legal-tender paper. Turkey and Persia have the gold standard nominally, but not in fact, the actual currency being gold and silver coins. Within a few months Turkey has commenced the issue of legal-tender government paper.

Africa has a considerable population, but, outside of Egypt and Cape Colony, its relation to coinages or legal standards is trifling and unimportant. Both of the precious metals are recognized as money among the peoples inhabiting it, who have a special preference for the silver dollar, the coin which centuries of use have made most familiar to them.

In the non-enumerated countries of Asia silver is the metal in general use, and some of them, as Siam, Burmah, and the Dutch colony of Java, have populations which are considerable, although small in comparison with the population of India and China.

In Spain a royal decree was issued in the summer of 1876, interdicting the coinage of silver except on government account. This decree also declared it to be the intention of the government to limit the legal-tender function of silver to 150 *pesetas*, or about $28, after it had obtained and coined a sufficient amount of gold to make it practicable to do so.

The *peseta* and franc are equivalents in value. The reason assigned for this intention was the depreciation of silver relatively to gold. The price of silver in London was at about its lowest point when this decree was issued. What influence the subsequent advance in its price in that market may have on the policy of Spain is uncertain.

In Holland silver was the sole standard until 1816. In that year the double standard was adopted with the legal relation between the metals of 15.873 to 1, which undervalued silver and practically banished it from the circulation. In 1847 silver was again adopted as the sole standard, not in consequence of the discovery of gold in California, but just before that event. The principal reason assigned by the statesmen of Holland for this change in 1847 was, that it had proved disastrous to the commercial and industrial interests of Holland to have a money system identical with that of England, whose financial revulsions, after its adoption of the gold standard, had been more frequent and more severe than in any other country, and whose injurious effects were felt in Holland scarcely less than in England. They maintained that the adoption of the silver standard would prevent England from disturbing the internal trade of Holland by draining off its money during such revulsions, and would secure immunity from evils which did not originate in and for which Holland was not responsible. In 1875 a law was passed interdicting the coinage of silver except on government account, and providing for an unrestricted gold coinage with unlimited legal-tender functions at a legal relation between the metals of 15.604 to 1.

This law was avowedly provisional, and was to expire January 1, 1877, unless re-enacted. The executive department of that country decidedly favor the gold standard, and have proposed two laws for its establishment, both of which have failed to receive the sanction of the legislative chambers. The law first proposed restricted the coinage of silver at the Java mint as well as at the home mint, and deprived silver coin in Holland, but not in Java, of the legal-tender function, except for small payments. The law last proposed prohibited absolutely the further coinage of silver. It did not demonetize coins already minted, but authorized the finance minister, at his discretion, to purchase and withdraw them from the circulation. The American minister to the Hague, November 27, 1876, referring to this law, says:

> With regard to the Dutch East Indian colonies the rule will be substantially the same, leaving it to the minister of finance to make proper arrangements with the colonial minister.

This law was agreed to in November last by the lower chamber, but was defeated in December in the upper chamber by a decisive vote; and thereupon, on the 23d of December, the ministry proposed a new law, substantially keeping in force the law of 1875, which was passed. The ultimate policy of Holland remains to be determined.

France, Belgium, Italy, Switzerland, and Greece constitute what is called the Latin Union, and are bound by treaty until 1880 to receive each other's gold and silver coins at their respective treasuries at a relation of value between the metals of 15½ to 1. By an agreement made in January, 1874, and which still continues with modifications, France, Italy, Belgium, and Switzerland limited their silver coinage (exclusive of subsidiary coins) to the following sums for the years named, stated in francs:

1874	140,000,000
1875	150,000,000
1876	108,000,000

These were the maximum amounts of the silver coinage permitted by the agreement for the years named respectively, but either country might decline to coin the quota assigned to it, and in fact Switzerland did so decline in 1875. In August, 1876, the President of France suspended entirely the coinage of silver, except for subsidiary purposes. This was in pursuance of a law passed August 5, 1876, authorizing him at his discretion to keep the mints of France closed against the coinage of silver until January, 1878. In December, 1876, Belgium, following the example of France, also suspended the coinage of silver.

These restrictive agreements and acts in respect to the silver coinage constitute what is known in current discussions as the "expectant attitude" of the Latin Union. They amount, on the one hand, to a refusal to join Germany in a gold standard, and, on the other hand, to a prevention of such an increase of their silver coins as would augment the difficulty and loss of going to a gold standard, if they should hereafter decide upon such a policy. They will be characterized as wisely cautious, or irresolute and weak, according to the varying opinions of observers. In fact, they may be neither; but rather the only compromise which was possible of nearly equally-divided counsels.

Only a small amount of silver now remaining in Europe.

It is objected by many that the remonetization of silver in the United States would induce a further and more general demonetization of that metal in Europe, and would make this country a reservoir into which would flow a swollen stream of cheap and cheapening silver. As it is not alleged that we are exposed to a dangerous inflow of silver from any other quarter, it may be useful to inquire what quantity in coin and bars there really is in the different countries of Europe at this time, and how much of that quantity is available for sale after their demands for consumption in the arts, and to keep their stocks of subsidiary coins good against abrasion and loss, have been supplied, and how much they will need annually in the future for these last purposes.

Italy, Austria, and Russia, having an actual currency of legal-tender paper, may be left out of this account. They have no silver to dispose of.

In respect to Italy, it is stated in the report (1876) of the British silver commission:

> Italy has been gradually denuded of her silver currency. Since 1865 large amounts have been exported; her forced paper currency has apparently expelled the whole of the metallic currency, of which the silver coins amounted at the beginning of 1866 to about £17,000,000.

In the tabulation in the same report of the quantities of silver thrown on the market during the four years from 1872 to 1875, both inclusive, Italy is put down as furnishing eight millions sterling, or as much as was furnished during the same time by Germany and the Scandinavian states combined. An Italian finance minister has estimated the Italian export of both the metals since 1866 at $200,000,000.

The facts given in the report made December 20, 1876, by Mr. Compton, of the British embassy at Rome, seem to justify his statement that "*since* 1866, *when paper money was introduced in the place of coin, nearly* £30,000,000 *worth of silver has been exported.*" This is nearly twice the estimate of the British silver commission. If it is true that $200,000,000 of both the metals have been exported since 1866, the estimate of Mr. Compton is more probably correct, as the proportion of silver to gold was always very large in the Italian circulation so long as it was metallic or convertible. Of the coins issued prior to 1862, those withdrawn have been in the proportion of $92,635,000 of silver to $5,415,000 of gold. In the new coinage since 1862, and down to 1876, the silver was £17,505,481 and the gold £9,446,688. In the public treasury and in all the banks in October last Mr. Compton states the entire metallic money at only £7,000,000, divided about equally between gold and silver. It is fully shown by all these statements that within eleven years Italy has thrown an immense amount of silver, undoubtedly approximating $150,000,000, on the markets, and that it can do nothing further in that direction.

The portentous political aspects in Europe do not justify the expectation of an early resumption of coin payments by either Russia or Austria. The paper rouble of Russia, which dates with the Empress Catherine, has had the varying fortunes of the wars and political events of a century alternately appreciating and depreciating, occasionally subjected to the process of scaling or partial repudiation, and during one brief period, from 1839 to 1857, redeemed in coin. If the great struggle threatened with Turkey takes place, monetary reforms will yield, as always, to more urgent national necessities. Of Austria, it is said that an annual treasury deficit has been chronic since 1789, and the actual needs of military preparation and observation justify no present hope of an improved condition.

Great Britain may be left out of this account, having demonetized silver two generations ago.

Germany must be included in the account, as the demonetization of silver there is not yet an accomplished fact. The estimates of the silver still to be called in and sold by that country are widely variant.

The known facts in the case are: the total amount of silver coins which had been struck down to the date when demonetization was determined upon, the amount taken in by the Government to February 28, 1877, the amount sold by the Government to September 30, 1876, and the amount used to February 28, 1877, in the manufacture of the new subsidiary coinage. What is unknown, and in respect to which there is an extreme variance of opinion, is the proportion of the coins heretofore struck which has been lost, melted or exported. The figures are:

Total amount of the old silver coinage	$431,650,000
Withdrawn to February 28, 1877	182,561,217
Used in subsidiary coinage to February 28, 1877	97,150,635
Actually sold to September 30, 1876	39,847,600
Converted into bars for sale, but not sold, September 30, 1876	9,855,200

If the sum of ten marks, equaling about two and a half dollars per head, which is the provisional per-capita limit of the subsidiary coinage, be made permanent, there will be needed, to carry the coinage up to that limit, about $8,000,000. If the limit be increased to fifteen marks, about $60,000,000 instead of $8,000,000 will be required.

The exports of silver from Germany to England were much greater in the latter than in the earlier part of 1876. During January and February of this year they were £1,317,880, or $6,391,718. During the same months of last year they were only £196,738, or $954,180. Upon the whole, it may be concluded that nearly the entire difference, which is $85,410,582, between the amount withdrawn and the amount used in subsidiary coinage to the end of February, 1877, has been sold.

Of the old silver coinage, $50,000,000 were in florins or gulden currency, all issued since 1837. The remainder consisted of the thaler coinages, some of them dating back to 1750. The gulden currency has been demonetized, and only 68 per cent. of it was presented within the time limited for redemption. It is argued that the proportion of loss must be much greater in the thaler coinages which have been subjected so much longer to the various causes of loss. The probable proportion of the loss of those coinages is fixed by some authorities as high as three-fifths, but against this view it is urged that the gulden currency was better adapted to export and better adapted to melting down, because containing more gold. The controversy will be settled when the coinage is all called in, and not before. The British silver commission, after groping about as best they could where so much was uncertain and obscure, concluded that the German government might, at the date of their report, July 5, 1876, still have had from $40,000,000 to $100,000,000 of silver to sell. The later evidence seems to point rather towards the higher than the lower estimate. The computation of the British commission included only the sales of $30,000,000 then reported and known. The sales to this time amount probably to $85,000,000, but the excess of such sales above $30,000,000 is certainly more than $40,000,000, the minimum estimate of the amount remaining at the date of the British report. Since November last, all the old silver coins have been demonetized, except the thaler piece and the sixth of a thaler piece, but the current reports are that the amount of the outstanding thaler pieces is still considerable.

The result will be largely affected by the conclusion finally reached as to the amount required for subsidiary coinage. The executive government has proposed to enlarge it one-half, or to fifteen marks per capita, but the proposition lies over for the present, some legislative opposition having manifested itself. If carried, the enlargement will require about $52,000,000 in silver.

The London Economist of February 3, 1877, states that the German coinage programme for the present year is to complete the subsidiary coinage up to the present legal limit, which will call for $8,000,000 in silver, and to coin 40,000 pounds in weight of gold (about $12,125,000) for the account of the government. The mints are always open, of course, for such gold coinage as individuals may require. If this is really the present programme of the German authorities, it implies either that they are not inclined to press the withdrawal of silver to an immediate conclusion, or that the quantity still to be withdrawn is not large.

In the appendix (page 1) to the report of the British commission is a careful estimate, which puts the amount of subsidiary silver in Great Britain, December 1, 1872, at £19,536,000. Taking the population of Great Britain at thirty-two millions, and the English shilling as the equivalent of the German mark, it would be about twelve marks per capita of the population.

The British commission say:

> It seems certain that more subsidiary coinage will be used in Germany than in England, owing to the smaller use of checks, and to the habit of daily payment for all family expenses, in the place of the English system of weekly or monthly bills.

It seems probable, therefore, that the increase of the German subsidiary coinage to fifteen marks per capita will finally be carried, and that even a greater increase may be found necessary.

The subsidiary coinage of France is limited to six francs, or about four and a half marks, per capita of the population. A much greater amount per capita would doubtless be required were it not for the fact that the necessity for it is lessened by the existence of the full-tender silver five-franc pieces, just as it is lessened in this country by the one and two dollar legal-tender and bank notes. But if the full-tender five-franc pieces were called in, as they would be should silver be demonetized, France would require at least as much subsidiary coin, per capita of the population, as Germany.

In the event of a remonetization of silver in the United States, and of its general demonetization in Europe, this country could not be flooded with silver from Italy, Austria, or Russia, which have none to dispose of, nor from Great Britain, which has none except what is fixed in subsidiary coins, nor from Germany beyond the small amount not yet withdrawn from its circulation. It is France which has nearly all the silver which is left in Europe, liable to be thrown on the markets of the world. The amount of this French stock, disposable in the event of demonetization, is as variously estimated as the amount of the German stock. The total number of five-franc pieces coined, from the commencement of the coinage in 1795 to its suspension in 1876, was 1,008,159,949, amounting in value to $947,500,000. The five-franc piece is the only full-tender silver coin in circulation in France. The silver coins under that denomination are below the French standard of fineness, and are tenders for only small sums. The British silver commission print a paper, stated by the chairman to have been furnished by "a high authority in France," whose name, however, is not given, in which the amount of full legal-tender silver in France is estimated at 2,200,000,000 francs, or $413,500,000. The bases of this estimate are, that in 1868 the authorities generally concurred in estimating it at 1,500,000,000 francs, to which had been added 500,000,000 by subsequent coinage at the French mint, and 200,000,000 by the importation of the five-franc pieces of the other states of the Latin union. Between 1857 and 1868 there was no silver coined at the French mints, except debased pieces for subsidiary purposes.

M. Cernuschi gives it as the general judgment of French authorities that the total metallic money of France, gold and silver, is $1,000,000,000. The proportion of gold to silver in the reserves of the Bank of France is as five to two, but may be less outside of that institution.

Paul Leroy Beaulieu (*Journal des Débats*, March 3, 1876) estimates the whole quantity of silver remaining at only 1,200,000,000 francs, one-half of which is in the Bank of France. Victor Bonnet makes estimates equally low. Ernest Seyd combats these estimates as being too low, and as being made by advocates of the gold standard for the purpose of underrating the difficulties of demonetizing silver, but he does not himself reckon the quantity at above £70,000,000 sterling, or $350,000,000.

The proportion of silver in the total amount of specie paid to and deposited in the Bank of France is diminishing. This fact is considered by French authorities as indicating that there is no plethora or excess of silver in the circulation.

Upon the whole, we may take $413,500,000 as a maximum estimate of the full-tender silver in France. It is probably less. Whatever the amount may be, 400,000,000 francs, or $75,000,000, would be absorbed in the event of the demonetization of silver in such an addition to the subsidiary coinage as would carry it up to twenty francs per capita, or about the equivalent of fifteen marks per capita in Germany.

In respect to the Scandinavian states, our minister to Denmark (letter of November 8, 1876, to Secretary Fish) says the demonetization of silver was completed October 1, 1876, and that the old silver coins had then entirely disappeared. The same thing is doubtless true of Norway and Sweden, as those countries conducted their movement toward a gold standard in concert with Denmark, and pursuant to treaty arrangements. In respect of Denmark, full accounts have been published of the silver withdrawn, of the amount sold, and of the amount reminted in subsidiary coins. These accounts are as follows:

Withdrawn	$11,397,500
Sold	6,882,150
Reminted	4,515,350

The annual consumption of silver in Europe would not be much diminished by its universal demonetization there. Its consumption in plate and in the arts would not be affected at all. Its consumption by the loss and abrasion of coins would be nearly if not quite as great as ever. Silver would still be the material of the coins used in retail transactions and by the masses of the people, and it is in coins so used that loss and abrasion chiefly occur. There would be less silver in the reserves of banks and public treasuries, but in such reserves loss and abrasion of coins do not occur.

The returns of British imports and exports of silver for eight years ending with 1875, show an average annual excess of imports of £1,147,500, or $5,837,500. The British commission set down £400,000 to account of waste and loss of coins, £350,000 to the account of plate, and £250,000 to the account of consumption in the arts. The consumption per capita on the continent of Europe would be less in the arts, but probably more in plate, than in Great Britain. The British commission say that the use of plate is mainly confined to the "higher classes" in England, whereas in France and Germany the "lower classes" and "peasantry" indulge in it in minor forms.

The Paris correspondent of the London Economist (December 16, 1876) says of the consumption of silver in that city, that "the demands are solely for manufacturing purposes, for which a value of a million of francs ($200,000) is required weekly." Paris, undoubtedly, manufactures for other consumers than the French, but the annual consumption of silver of the value of $10,000,000 for manufacturing purposes in that single city is, in any aspect, a noteworthy fact. The consumption in the coinage on the continent of Europe through abrasion and loss would be immense if it were not for the expulsion of the metals by paper in several large countries, but, even under existing circumstances, must be several times larger than it is in Great Britain.

The substitution of gold for silver in Europe has been in progress ever since the discovery of gold in California, and consequently the amount of silver remaining even in the specie-paying countries of Europe cannot be formidable. The only thing which could occur hereafter to disturb materially the relation of the two metals would be the resumption of specie payments by Italy, Austria, and Russia. How the relation would be affected depends upon the metallic standards which those nations might select hereafter. If they should resume upon their present metallic standards, resumption in Italy, which is a double-standard country, would simply tend to restore the old relation of 15½ to 1, while resumption in Russia and Austria, which are silver-standard countries, would not only carry silver up to an equivalency of 15½ to 1, but might carry it still higher. If all these countries should resume or seriously attempt to resume specie payments, and on a gold standard, it would enormously increase the demand for and relative value of gold; but such a resumption in those countries is impossible, and any attempt in that direction improbable. Their resumption on any metallic standard, within any near period, is wholly improbable.

If silver were remonetized in the United States, the amount which would be absorbed here, in the event of the resumption of specie payments, would exceed any visible supply which Europe has to dispose of, and would restore the relative value of silver to what it was before the recent movement of Germany. And in all contingencies, the permanent value of silver rests securely upon the magnitude of the silver stock, upon its diffusion over so large a part of the globe, and upon the silver-absorbing power of the world, and especially of Asia, whose vast populations, whatever may be done with silver elsewhere, must continue to use it as their money for an indefinite period. The exchangeable values of gold and silver, respectively, whether as commodities or money, depend upon the demand and the supply, and the demand depends upon the numbers and wealth of those who make the demand, and not upon their intelligence, civilization, or refinement.

Magnitude of the Asiatic demand for silver.

It will certainly meet all the requirements of the discussion to consider the question of remonetizing silver in the United States upon the assumption that silver will continue to be used as money in most of the regions of the world where it is now so used, and especially in Asia. This is the assumption, in fact, of European advocates of the gold standard, and they insist upon it as the adequate answer to those who point out the disaster and ruin that would follow a universal demonetization of silver.

Humboldt estimates that at the beginning of this century the production of the precious metals in America, principally silver, was $43,000,000, $25,000,000 of which went to Asia in the course of trade, and never to return.

Asia has been known in all historical times as the sink of silver.

In the twenty-six years from 1851 to 1876, both inclusive, the specie exports to Egypt and the East were—

	Silver.	Gold.
From Great Britain	$741, 886, 000	$135, 483, 885
From French ports	294, 671, 450	181, 579, 150
Total	1, 036, 557, 450	316, 963, 035

This is an annual average of $39,867,594 of silver and $12,190,886 of gold. (See Quetteville's circular.)

British India alone, in the forty years ending with 1875, had an excess of silver imports over exports of £198,464,000, or nearly $1,000,000,000, and during the same period an excess of gold imports of $500,000,000.

In the same forty years, the silver coinage of India was £210,660,975.

Of this amount there were £21,000,000 of old coins re-minted, which being deducted from the total of the coinage would leave £189,060,975, or nearly $900,000,000 as the addition made in those years to the previously existing money-stock of India.

The testimony is clear that the India demand for silver generally, and for silver coins in particular, is as unsatisfied and exigent as ever. If India was oversupplied with silver, the prices of commodities would be abnormally high, whereas the reverse is the fact. The effectiveness and urgency of the demand in any country for money are measured by the general scale of prices at which its commodities are offered to the world. Tried by this test, the India demand for silver, which is the money of India, was never greater. The governor and council of India, in a minute, published last summer, of their reasons for keeping the mints open to silver, say:

> First, gold has risen in value since March, 1873, and especially since last December. Second, it is not shown that silver has fallen in value, *i. e.* as compared with commodities in general, either in London or in India, during the same period.

The London Economist (October 28, 1876) says of this paper:

> As a whole, both in its conclusions and reasonings, the "minute" is most admirable.

The council of India kept well on the safe side in saying that silver had not fallen in value in India since 1873, or, in other words, that the prices of India products had not risen. Most of the authorities concur that silver has risen in India rather than fallen since that time. A New York writer, J. S. Moore, who has special facilities for information on this subject, says (New York Evening Post, October 24, 1876) that "Indian products are, at present, at their lowest ebb, as compared during fifteen years." At the annual meeting in September last of the shareholders of the Oriental Bank of London, which has extensive and intimate connections with the India trade, the president said that, with few exceptions, India produce was so low that even the general war supposed to be menacing Europe could not make things worse. To the same effect was the testimony last summer before the British commission, and it is not weakened by the fact, which the commission say is borne out by the testimony, that the imports as well as the exports of India are on a low range of prices. Both facts prove the same thing, that silver is not in excess, but scarce and deficient, in India.

The demand in India for coined money, on any scale, is of very modern origin, not antedating the present century, and has become important even more recently than that. The old native practice was to pay land-rents in the products of the land, and nearly all transactions even fifty years ago were by barter. W. Nassau Lee, one of the best informed and most intelligent writers on Indian topics, in a work entitled "Drain of Silver to the East," dated at Calcutta in 1863, but printed in London, states that the use of coined money was still not common outside of the cities, and that the general use of it would require an additional amount of £400,000,000, $2,000,000,000. This estimate was on the basis of an assumed population of 180,000,000, (now known to be 237,000,000,) and on an amount per capita equal to what is employed in Great Britain, although in Mr. Lee's opinion India required more, because making less use of credits and representative money. Colonel Hyde, who was for fourteen years director of the Calcutta mint, testified before the British commission to the same general facts which are given in Mr. Lee's work, and gave it as his opinion that "*its* (India's) *capacity for absorbing silver remains great.*" Another witness, McKenzie, who had been a merchant, indigo-manufacturer, and railway-manager in India, testified that the circulation in many parts of that country was "*totally inadequate.*"

There have been, of course, fluctuations in the balances of India trade within the last forty years. The silver imports, from 1871 to 1875, were on a lower average than during the last forty years, and on a much lower average than during the American civil war, when India largely supplied the world with cotton. There were equal and even greater fluctuations prior to the last forty years. In one year, 1832–'33, according to Mr. Lee, "the flood of silver to India almost dried up." But notwithstanding temporary fluctuations, the great fact that India is a sink of silver is as true to day as it has been from the earliest period of history.

That it will continue to draw silver from the rest of the world rests upon the permanent conditions that it has no silver mines, while it abounds in commodities which command the precious metals, and has a vast population, industrious and rich, whose demand for silver for use as money is constantly increasing, and whose passion for both silver and gold, for decoration, ornamentation, and personal adornment, is proverbially universal.

The following is a statement of the foreign commerce of India for the thirty-six years, from 1835 to 1871:

Exports of merchandise	£1, 012, 000, 000
Exports of gold and silver	37, 000, 000
Imports of merchandise	583, 000, 000
Imports of gold and silver	312, 000, 000

The British commission discussed at length this India problem, relating as it does to the greatest of the British dependencies, and arrived at the conclusion that "as India has been a great consumer of silver in the past, so it will continue to be in the future."

In respect to China, with its teeming population, no circumstance is suggested likely to diminish its demand for silver, which is its principal money, current by weight. That empire is now proposing, for the first time in its history, to establish a mint for the coinage of silver. Such a coinage would have an immense influence in extending the monetary use of silver in that country. It would cause the same substitution of cash for barter which followed the establishment of a mint in India, and, in addition, would replace with small silver coins the cumbersome coins of base metal now employed. The American minister to China, writing from Peking, August 9, 1876, says the prospect of the establishment of a mint is "excellent."

Current facts show how groundless was the apprehension, which was so large an element in producing the late silver-panic, that the East would cease to absorb silver. The flood of that metal to the Orient has already set in again with redoubled force. The London Economist gives the following as the silver-exports from England for the years 1875 and 1876, respectively:

	1875.	1876.
To British India	£3, 231, 266	£8, 229, 124
To China	863, 131	1, 249, 729

Rating the pound at $4.85, this was an aggregate export in 1876 to India and China of $45,975,438. In three only of the last twenty-six years has it been greater. The average of the last twenty-six years was $28,748,077. In 1876 it was, therefore, $17,000,000 in excess of this average, and the prices of India products are still abnormally depressed, which is another mode of saying that the India demand for silver is still unusually great.

But the figures thus commented upon do not give the whole case, and especially in respect to China, inasmuch as, by a recent change in the course of trade, much larger amounts than formerly are being sent to the East from San Francisco, and a good deal of it on London orders and account. The amount sent during the year 1876 was $9,119,031.

During January and February of the present year, the silver export from San Francisco to China and Japan has been $2,625,681, and the British silver export to China and India has been £2,119,025, or upward of $10,000,000. This is more than three times what it was in the corresponding months of 1876.

We have in the operations of the Vienna mint another illustration, and on a considerable scale, of the sure tendency of the East to absorb silver when it falls in its gold price at the West. It has long been the practice of that mint to strike a particular coin, the Maria Theresa thaler, for exportation to the East, and especially to Egypt, where it has been for many years a familiar and favorite species of money. The amount of this coinage, rating two Austrian florins as equal to one dollar, has been as follows:

1869	$16,838
1870	97,737
1871	11,471
1872	166,923
1873	363,791
1874	2,609,006
1875	3,485,760
1876	5,319,792

As silver fell relatively to gold, the Austrian export of silver to the East, in the accustomed form of the Maria Theresa thaler, increased.

There is one feature of the India trade which seems to have escaped altogether the attention of the British commission, although it has a direct bearing upon the power of the East in general and of India in particular to steady the relative value of the metals. Of the $1,500,000,000 absorbed by India in the forty years ending with 1875, one-third was gold. Gold is not demanded there for use as money, but as a luxury, and when it rises in value India will export it or import it in less measure, which is the same thing in its effect upon the relative value of the two metals.

Comparing the first eleven months of 1876 with the same months of 1875, we find the excess of gold-imports into England from India and China, respectively, over exports from England to those countries, to have been as follows:

	1875.	1876.
From India	£4,717	£1,126,448
From China	278,508	757,958

It is thus that the East will restore and steady the relation of the metals, not merely by taking silver, but by giving up gold, or by taking it in less quantities.

In this way India may, to some extent, obtain the silver it needs, notwithstanding that the amount it has to pay annually in London as interest on debts has become so much greater than formerly. In whatever proportion it gives up the purchase of gold, or sells the gold it has in its possession, it will find a new resource for acquiring silver. Gold will be sure to be given up as the necessity for money (silver) becomes urgent.

Proportion of gold in the world's metallic supply greatly increased since 1848.

Since the voyages of Columbus, the two forces which, acting against each other, have controlled the value of the precious metals, both in their relation to commodities and in their relation to each other, have been the supplies from the New World and the demand for them of that preponderant mass of the human race inhabiting Eastern Asia. So far as the relative value of the two metals is concerned, these opposing forces came to an equipoise about the middle of the seventeenth century, which has been substantially maintained for more than two centuries, and down to the erratic movement of the last two years.

In respect to the supplies of the precious metals since the discovery of America, that of silver, from its bulk and weight and the methods of its production, is the more easily ascertained. Statisticians have always assumed that they had tolerably accurate accounts and estimates of the silver production of Spanish America, which has furnished the greater part of the world's supply of silver since 1492. The production of gold is not so easily ascertained; but so large a proportion of what has been found within this century has come from the highly civilized communities of California and Australia, where records are kept of coinages and of exports of coined and uncoined treasure, that estimates of totals may be fairly reliable, although embracing some productions not likely to be accurately reported.

Distinguishing the periods prior and subsequent to the California discovery, we have the following estimates:

Supplies from 1492 *to* 1848.

	Gold.	Silver.
From America	$1,998,000,000	$5,261,000,000
From elsewhere	628,000,000	441,000,000
Total	2,626,000,000	5,705,000,000

Supplies from 1849 *to* 1876, *both inclusive.*

Gold	$3,215,000,000
Silver	1,367,000,000

The estimate from 1492 to 1848 is that of Chevalier, which Soetbeer adopts.

The estimate from 1849 to 1876 is based, as to most of the years, upon the figures of Sir Hector Hay. The estimate of the London Economist is rather less. That of Soetbeer is about the same. But the differences in the commonly-accepted estimates are not important.

When we pass from the question of current supplies to the other questions of the stocks on hand, of the location of stocks as between the East and West, and of the proportions of gold and silver at various dates, we are confronted by doubts and difficulties at every point.

If the amount of gold and silver produced since 1492 were accurately ascertained and agreed on, it would still be important to the discussion to know the amount then in existence. We only know in respect to Europe that the great abundance of the precious metals at the time of the Roman Empire was succeeded by the extreme scarcity of the Middle Ages; and of the East we know comparatively nothing. The few oriental travelers prior to the discovery of America gave glowing and possibly exaggerated accounts of the great wealth of the East in gold, silver, and jewels, but they furnish no reliable data upon which to base estimates. Even if the exact amount of the precious metals existing in 1492 and the amount that has been produced since were known, the amount consumed since in the arts and by abrasion and loss would still be indeterminate, and the proportionate amounts of gold and silver respectively in the stock would remain uncertain. Even if the relative production of gold and silver in past periods were known, their relative amounts in existing stocks could not be assumed to be the same, as the proportionate amount of each lost and consumed in various ways may have been essentially different.

It is agreed that the proportion of gold in the stock of the precious metals has immensely increased since 1849.

Before that year it was ordinarily estimated that silver was in excess in the world's stock in the proportion of three to one, and in the stock of the Western World (meaning by that, Europe, America, and the civilized portions of Africa) in the proportion of two to one. All authorities agree that in the stocks of the Western World the proportions are reversed, and that gold is now in excess. In 1866 Chevalier fixed the proportion in the Western World at 44 of gold to 30 of silver. Xeller fixed it at the same time at 37 to 28. The proportion of gold has increased since then.

At any rate, there has been since 1848 a complete reversal of the old proportions of gold and silver in the supplies and a very large change of proportions in the stock of the precious metals, and, notwithstanding these facts, the relative value of the two metals remained substantially steady until within two years.

Deficiency of the silver production since 1848, *made up so far from the silver stock held in Europe in* 1848.

The relative deficiency in the production of silver since 1849 has been made up, so far, by the quantities released from the circulations of Europe and the United States, and the relative excess in the production of gold since 1849 has been absorbed into the circulations of Europe and America. If this releasing of silver from, and absorbing of gold into, the circulations of Europe and the United States could go on indefinitely, the time would never come when the Asiatic demand would raise the price of silver. But Europe and the United States can release silver only so long as they have any to release, and this process must end when the substitution of gold for the silver in their circulations is completed.

In France, the metallic circulation has always been large, and consisted almost entirely of silver when the California and Australian gold-fields were discovered. After those discoveries silver was exchanged for gold until the major part of the French circulation became gold, and is so now. From 1856 to 1867 not a single full-tender silver coin was minted in France, although its mint was open to anybody that had silver bullion. Jevons estimates that, down to 1859, $500,000,000 of the Australian and California gold had been absorbed in the French circulation, and a nearly corresponding amount of silver displaced and made disposable for the markets of the world. Mint returns would justify a higher estimate. During the seventeen years of the reign of Louis Philippe, ending with the date of the California discovery, the total French gold coinage was £8,600,000, making an annual average coinage of £500,000. From 1850 to 1858, both inclusive, the total French gold coinage was £129,587,735, making an annual average of £14,343,082. The increase in the coinage during these nine years over and above the total coinage during the preceding seventeen years was £120,987,735. The total French gold coinage from 1848 to 1871, both inclusive, was £259,801,000, or $1,261,000,000, rating the pound at $4.85.

Professor Hansen, of the Berlin University, said in 1868:

> Europe, or rather the whole civilized world, is indebted to French law for its escape from the perturbations in the relative prices of gold and silver, threatened by the enormous arrivals from Australia and California.

The exchange of silver for gold in the circulation of various countries in Europe has been steadily progressing ever since "*the enormous arrivals from California and Australia*" made gold the most available metal. There has been in addition a displacement of silver without a substitution of gold, by the suspension of specie payments in Russia, (1857,) Austria, (1868,) and Italy, (1866,) the two first being silver-standard countries, and the last being a double-standard country. The exchange of silver for gold under the operation of the double standard was easy and natural. It was injurious to no interest and did not affect the relative value of the precious metals, until the German law of 1873 demonetizing silver came into practical effect. Even that law could not have affected the relative value of the metals, if other nations in Europe had not restricted and suspended the coinage of silver. The Latin Union agreed upon a restriction in January, 1874, before the relative value of the metals was affected at all, and nobody can doubt that France alone, which had absorbed in nine years after the California discovery five or six hundred million dollars in gold, could have absorbed the one hundred millions of silver, which Germany has occupied four years in selling, without a disturbance of the relative value of the metals. But in any event, whether the displacements of silver from the European circulation have arisen from substitution of gold, suspensions of specie payments, demonetization of silver, or closure of mints against its coinage, the process must come to an end when all the silver which can possibly be spared consistently with the requirements for a subsidiary coinage is disposed of. This end is practically reached already if France adheres to the double standard, and is not very far off if France demonetizes silver, as it has no such quantity of that metal as it had in 1849.

If the exchange of silver for gold shall still continue in Europe, it will be no new force acting on the market, but a force which has been acting without interruption since the California and Australian discoveries. It can only continue until the present very much reduced stock of European silver which is disposable shall be exhausted. It is a force which has no novel or undefinable terrors. We know its exact gauge and measure by an experience of nearly thirty years. The utmost it has been able to effect, leaving out of view the recent short period of panic in the silver-market, has been to preserve substantially undisturbed the same relative values of the metals that have existed for about two centuries.

In 1849, nearly the entire mass of the metallic money of the continent of Europe consisted of silver, the gold-standard being confined to Portugal and to the island of Great Britain. Holland and Russia were single silver-standard countries. The double standard existed legally elsewhere, but the quantity of gold in circulation was very small. If the Asiatic demand for silver had not existed, the new gold received after 1849 would have been simply an addition to the general mass of metallic money in Europe, and could not have affected the relative value of gold and silver, as both were concurrent in the circulation. But by reason of the Asiatic demand for silver, that metal was withdrawn from the European circulation, and its place supplied by gold. This withdrawal of silver diminished, of course, the aggregate volume of the two metals in Europe. The law of the double standard made the entire operation easy and automatic. As the laws invested silver and gold equally with the monetary function at a stated equivalency, it was of no consequence which metal was retained and which displaced. The absorption of gold by Europe tended to check a depreciation in its relative value from excessive production. The exportation to Asia of the surplus current supply of silver and the displaced stocks of Europe, tended to check a rise in the value of silver in Asia. No interest was injured. On the contrary, the interests of both Europe and Asia were conserved.

It is plain that within the past thirty years the Asiatic demand and the demand of the arts and the abrasion and loss of coin have absorbed not only all the current supplies of silver, but also the larger part of the stock of that metal existing in Europe in 1849. These absorbing and consuming forces still continue undiminished. There can be no reasonable doubt, the European stock now being nearly exhausted, that these forces unaided will be powerful enough in the near future to overcome the effects of the German demonetization of silver and neutralize the effects of the general closure of the mints against it, and to restore the relation of value between the metals which has existed during the greater part of this century.

There are no large stocks of silver in coin and bars anywhere outside of what is in actual and active circulation. In the great banks of the world, except in the Bank of France, there is but very little, and in that institution there is only about two-fifths as much as of gold. In this country, the whole amount outside of plate and the subsidiary coinage is estimated by the Director of the Mint not to exceed $3,000,000.

There is but little in London, and none at all in Paris, except in coins. The London Economist (December 9, 1876) says the stock there has run down, because "all dealers are fearful of keeping any amount on hand;" and the Paris correspondent of the same journal, writing two days before, says:

> Bar-silver is in demand, but *there is none in Paris.* Dealers sell at equal to 56⅝ per ounce for English-standard silver, *but orders have to be executed in London.*

The fact that it has needed all the silver liberated in Europe, by demonetization and suspensions of specie payments, in addition to the annual supply, to prevent a rise in its value relatively to gold, is explained and confirmed by such approximate estimates as can be made of the annual absorption of silver in plate and in the arts and by the abrasion and loss of coin.

Estimates of consumption of silver in the arts, and by the abrasion and loss of coins.

In the eight years ending with 1875 the imports of silver into Great Britain exceeded the exports by $44,379,500, making an annual average excess of imports of $5,547,437. The British silver commission assume that this sum of $5,547,437 represents the annual silver consumption of Great Britain, but they overlook the fact that there should be added to this excess of imports over exports the amount of silver taken from its own mines, and also the much larger and very considerable amount extracted in England annually from imported argentiferous ores and lead. Sir Hector Hay, in his testimony before the British commission, estimates the value of this last amount at £1,000,000, or $5,000,000; but it is only recently, and in consequence of improved methods of extracting silver from lead, that it can have reached so large a figure. In 1865 it was estimated at less than one-fifth as much. Ernest Seyd, quoting R. Hunt's Mineral Statistics, estimates the annual production of the British silver-mines at £140,000 to £160,000, or from $700,000 to $800,000, and says that the annual aggregate of this production, together with that of the British metal-refineries, is not less than £1,000,000.

Assuming that they had only $5,547,437 to account for, the British commission set down two-fifths of it to the account of keeping up the silver coinage and three-fifths of it to the account of use in plate and the arts. If this last estimate is not too low, Jacob's estimate, made in 1831, or nearly fifty years ago, that Great Britain used in plate and the arts £820,521, or $4,000,000, must have been too high. But if the annual silver consumption of Great Britain is really no more than $5,547,437, Germany, France, and the United States, with a population three and three-fourths times greater than that of Great Britain, must, at the same rate, consume $20,802,889.

To assume the same ratio of consumption in France, Germany, and the United States as in Great Britain is far inside of the probabilities. So far as waste in the coinage is concerned, it is very much larger at the present time, because they use a very much greater quantity of silver coin. The United States use less, but France uses four times as much, and Germany uses more, and will do so until its silver demonetization is completed.

As to the future, making the suppositions most unfavorable to silver, that France abandons the double standard, that the United States do not restore it, and that Germany perseveres in its gold policy, all those countries must have as large a subsidiary silver coinage per capita as Great Britain. As to use in plate and the arts, the evidence is that

Germany and France use at least as much per capita as Great Britain. In this country, where the ability to indulge in luxuries is vastly more diffused and general, this use is unquestionably greater.

Upon the whole, if the United States do not restore the double standard, and should France abandon it, those two countries, together with Great Britain and Germany, would still consume annually in manufactures and the abrasion and loss of coin at least $30,000,000 worth of silver. At the present time they use up more than that, as France has now not only the double standard legally, but has actually in circulation a large amount of silver, approximately $300,000,000, beyond what a merely subsidiary coinage would require.

The silver used by the Paris manufacturers is estimated at 1,000,000 francs per week, or $10,000,000 per annum. A part of this manufacture is undoubtedly not consumed in France, but exported or sold to the wealthy foreigners with whom Paris is always thronged. It is not possible to explain the excess of French imports of silver over exports, except by assuming a large French manufacture of silver. This excess for the eight years ending with 1875 was $262,415,000, of which only $140,000,000 is accounted for as being either in coins or as having been sent to the mints to be coined, and $80,000,000 as consumed by the Paris manufacturers. The remainder, being $42,415,000, or $5,301,375 annually, may be accounted for as used by French manufacturers outside of Paris, or by supposing that there may be inaccuracies in the custom-house returns.

In the first eleven months of 1876, the excess of French silver imports over exports was $24,590,259, of which $9,717,080 was minted, leaving $14,873,179 unaccounted for.

Taking the estimates of the Commissioner of Mining and of the Director of the Mint, the total silver production of the United States in seventeen years, from 1860 to 1876, both inclusive, was $289,854,527.

During the same period the exports and imports of silver were as follows:

Exports.

Domestic coins	$36,693,840
Domestic bullion	189,209,927
Foreign coins	83,535,207
Foreign bullion	921,552
	310,360,526

Imports.

Coins	$99,382,668
Bullion	6,894,088
	106,276,756

This leaves a net export of $204,083,770, which being deducted from the amount produced would leave as still remaining in the country $85,770,757.

During this period the consumption of silver through the abrasion and loss of coin was trifling, as no coin of any description was in circulation except for a short time during that period, it having been expelled by legal-tender paper. The consumption, therefore, must have been in plate and in the arts, and the data for computing it are—

First. The excess, $85,770,757, of the production above the net export.

Second. The diminution in the stock of silver coins and bullion between 1860 and 1876. The stock now, outside of $30,000,000 in subsidiary coinage, is estimated by the Director of the Mint at $3,000,000. To January 1, 1860, there had been minted $41,487,207 of underweighted silver coins, under the act of February 21, 1853, designed exclusively for domestic use. The mint value of this coinage being above its bullion value, it could not be exported profitably, and consequently all or nearly all of it continued in domestic use until specie payments were suspended in 1862. There was also, in 1860, a considerable quantity of full-tender American silver coin in use, and a still larger quantity of foreign silver coin, especially Mexican dollars and French five-franc pieces.

Third. The quantity of the foreign silver coin, not entered at the custom-houses, brought in by the 4,508,852 immigrants that arrived in this country during the seventeen years referred to.

The New York Commissioners of Emigration (December 15, 1854) say:

> German immigrants have, for the past three years, as estimated by the best German authorities, brought into the country annually about $11,000,000. The amount of money thus brought into the country is incalculable.

In 1856, these commissioners questioned all the immigrants, and found that, according to the answers, the actual cash brought into the United States by them averaged $68.08 per capita of the 142,342 arriving in that year.

Superintendent Kennedy's report (January, 1858) says:

> While the table of 1856 presents the average amount of cash means at $68.08 per head, subsequent information showed that, had full admission been made of the funds in possession, the average would have been at least double the amount reported.

It cannot be known in what proportions this cash, amounting to more than $300,000,000, brought in by immigrants in these seventeen years, consisted of bankers' drafts, gold, or silver. Gold is easier to carry, but, on the other hand, the German immigration bringing in the most money was from a country having for the greater part of the time no gold currency.

A review of all the facts of the case seems to justify a conjecture if not an opinion that the consumption of silver in the United States, in plate and in the arts, during these seventeen years, averaged annually $10,000,000.

The populations of Europe, (exclusive of France, Great Britain, and Germany,) of America, (exclusive of the United States,) of Africa, and of Australia are as follows, respectively:

Europe	192, 000, 000
America	46, 000, 000
Africa	203, 000, 000
Australia	4, 500, 000
Total	445, 500, 000

Throwing out of this account altogether the barbarous portion amounting to 160,500,000 of the African population, it may be assumed that the remaining 285,000,000 consume per capita two-fifths as much silver as the people of Great Britain, or $19,762,732 annually. A small group of countries, (Holland, Belgium, the English colonies, Switzerland, and the Scandinavian states,) with a population of 26,500,000, consume quite as much per capita as Great Britain. Austria, Italy, and Russia in Europe, with a population of 132,000,000, have substantially expelled silver by paper, and use very little in coinages, but their wealth and habits make them large consumers in other forms. Northern Africa uses silver largely in both forms, and so does Spain.

If the annual silver production of the world does not go above its present figure of $74,000,000, and if the annual consumption outside of Asia continues at $50,000,000, the total inadequacy of the remaining $24,000,000 to supply the Asiatic demand is apparent. It is certain that

British India alone, containing only one-fourth of the population of Asia, consumed that quantity annually on the average of the forty years ending with 1875. Schem's Statistics gives 798,000,000 as the total population of Asia. This estimate includes 182,000,000 outside of India and China. Undoubtedly, the consumption of silver in India is above the average of Asiatic consumption, but it is everywhere considerable, and in China is constantly increasing, and in probable contingencies may increase very largely. During the last year (1876) India and China took $55,000,000 from England and San Francisco.

Even if the future European demand for silver shall be less than what it was before 1849, it is never to be forgotten that the silver production, which is now less than that of gold, had been, from the discovery of America to 1849, two or three times greater, and that it was upon this anterior proportion of production that the relative value of the metals had adjusted itself, and had been substantially steady for two centuries prior to the discovery of the great gold fields of California and Australia.

Recent fluctuations in relative value of gold and silver.

As this branch of the investigation appertains especially to the probabilities of future steadiness in the value of silver, a *resumé* of the facts connected with the recent panicky changes in the relative value of gold and silver would seem to be necessary, in order to form a correct judgment as to whether there is any cause to apprehend their recurrence in the future. On the one hand it may be said that the possibility of such changes, proved by the actual fact of silver having been sold in London at $46\frac{3}{4}$ pence in gold per ounce, is sufficient to impair confidence in its future steadiness. On the other hand it may be said that the divergence in the relative value of the metals was wholly due to a rise in gold. A comparison of general prices in 1873, when the German demonetization of silver went into effect, with present prices, will show that the purchasing-power of both metals has increased, and gold more than silver to the full extent of the divergence. But even if it were due equally to a rise in the value of one metal and a fall in the other, or entirely to a fall in silver, it may be demonstrated that it cannot be other than temporary, and that the concurrence of the causes producing it can never again be possible.

The relative value of silver and gold of $15\frac{1}{2}$ to 1—which is equivalent to $60\frac{7}{8}$ pence in standard gold for an ounce of standard silver—had not varied in the London market very materially, or for any great length of time, during this century, until 1875.

The average quotation during 1875 sunk as low as $58\frac{7}{8}$ pence.

During 1876 the range of fluctuation in the London market in each month was as follows:

January	$56\frac{1}{8}$	$54\frac{7}{8}$
February	$54\frac{7}{8}$	53
March	$54\frac{1}{4}$	$52\frac{1}{2}$
April	54	$53\frac{1}{2}$
May	54	52
June	52	50
July	$51\frac{1}{2}$	$46\frac{3}{4}$
August	$53\frac{3}{4}$	50
September	$52\frac{9}{16}$	$51\frac{1}{8}$
October	$53\frac{1}{2}$	52
November	55	$53\frac{1}{8}$
December	$58\frac{1}{2}$	56

In their circular of January 4, 1877, reviewing the business of 1876, Pixley & Abell, bullion-brokers in London, state that on the 8th of July there was "*an exceptional sale at* 46¾." Such a quotation is of no more value than the maximum gold quotation of Black Friday in New York.

The causes which, in concurrence, produced the fluctuations in the relative value of gold and silver which culminated in July, 1876, were—

First, the demonetization of silver, by Germany in 1871, by the United States in 1873 and 1874, and by the Scandinavian States in 1874; the limitation on the coinage of silver imposed by France, Belgium, Switzerland, and Italy in 1874; the closure of the Holland mint against the coinage of silver on private account in April, 1875; the refusal of Switzerland, in 1875, to coin silver at all, and in the summer of 1876, by authority given to and actually exercised by the President of the French Republic, the suspension of the silver coinage altogether; the Spanish royal decree (1876) closing the mint of that kingdom against private depositors and declaring the purpose of that government to demonetize it for all sums exceeding $28 at the earliest practicable moment; and the submission (1876) to the Dutch legislative chambers of a ministerial project of demonetizing silver in Holland, and of extending to the mint in Java the restriction against coinage for individuals already imposed (April, 1875) upon the mint in Holland.

Second, a serious decline, for the time being, in the India demand for silver.

Third, an increase in the production of silver in the United States, considerable in fact, but the effect of which was immensely increased by exaggerations, and by the persistent error that the yield of the Comstock lode was wholly of silver, when it was really about one-half gold.

Fourth, the summary suppression by Germany of $130,000,000 of bank-notes and the consequent demand for gold to take their place.

Fifth, a law of the United States, enacted in 1875, ordaining a resumption of payments in gold January 1, 1879, and thus menacing the world with another enormous demand for that metal.

In respect to the effect of the last two facts, it may be observed that the British resumption of gold payments in 1821 raised the value of gold relatively to silver 5 per cent., although at that time all other countries had either the double standard or the silver standard, and there was, therefore, no such competition for gold as exists now. If the circumstances existing then had been similar to those existing to-day, England either could not have resumed payments in gold at all, or would have caused a much greater disturbance of the relation of the metals by such resumption.

Upon this enumeration of the causes of the recent divergence in the relation of gold and silver, it may be safely concluded that they will never exist again concurrently. At certain periods there may occur a great increase or decrease in the yield of either or both of the precious metals from the mines; or at certain intervals there may occur monetary crises and stagnations in commerce and industry. It is always possible that governments may tamper with their money standards, or may suspend or limit the coinage of either gold or silver. Each and all of these circumstances would have a greater or less effect upon the value of the precious metals, relative or otherwise. Overmastering exigencies sometimes compel national suspensions of specie payments, and neither national suspensions nor resumptions can occur without a perturbing effect upon the value of the precious metals relatively to other things, nor without such effect upon their relative value, if the countries suspending or resuming have their money standards based on a single metal. But it is not probable, nor scarcely possible, that all the causes of a divergence between the metals which have been operative in the recent case can ever again be acting simultaneously and in one direction within any period which need be covered by the foresight of legislation. There is an equal chance that all these causes may operate hereafter simultaneously in the other direction; and if it be wise to legislate against remote contingencies, gold should be demonetized as well as silver.

The tendency of the two metals to return to their old relation, or of silver to recover from its fall, if the latter mode of expression is to any persons more acceptable, was manifested very soon after the silver panic of last July, and has made a degree of progress which tends to confirm the belief that, in any event, the full recovery of the old relation may be relied upon. The partial recovery actually realized, while the causes of the widening of the relation of the metals still continue active, proves the existence of great forces always at work to steady the relation. No mints closed to silver have been opened to it; no law demonetizing silver has been repealed; no threat of demonetizing it has been withdrawn; and the supply of silver from the mines continues undiminished, although some of the exaggerations concerning it have been corrected. Nothing has been done by our Government since July, 1876, to raise the gold-price of silver, except the continuance of the coinage of subsidiary silver, authorized and commenced long before, under the resumption act of January, 1875. The influence of this demand has been more than offset by supplies from the increased sales of silver by the German government since last summer. The gold-price of silver has advanced since July, 1876, not by the aid of governments, but from its own inherent strength. Its value rests securely on the magnitude of the existing stock, its universal diffusion, and the universal demand for it by the people of all countries, and especially by the teeming populations of the East.

Jevons, who advocates the gold standard for Europe, said two years ago, (Money and Exchanges, page 142:)

> The hundreds of millions who inhabit India and China and other parts of the eastern and tropical regions employ a silver currency, and there is not the least fear that they will make any sudden change in their habits. Although the pouring out of forty or fifty millions sterling of silver from Germany may for some years depress the price of the metal, it can be gradually absorbed without difficulty by the eastern nations, which have for two or three thousand years received a continual stream of the precious metals from Europe. If other nations should, one after another, demonetize silver, yet the East may be found quite able to absorb all that is thrust upon it, provided that this be not done too rapidly.

In Asia, as elsewhere, the demand for money, in the sense of desire for it, is unlimited and insatiable. Undoubtedly the effective demand of Asia is limited to its capacity to pay for silver, but this guarantee of the value of silver, which is its money, is nothing short of the entire mass of the disposable commodities of the Asiatic world. It is difficult to see how any amount of silver which Europe has left, whether thrown upon Asia "rapidly" or otherwise, can have anything beyond the most transient influence.

The evidence on this branch of the subject all goes to establish the conclusions that the Asiatic demand alone will be sufficient, within a comparatively short period of time, to absorb the surplus stock of silver in Europe and overtake the current supply and place silver at its old relation of value to gold, and that, if the United States should remonetize it, the practical resumption of specie payments could not be more than fairly begun before the old equivalency between the metals would be restored. It is apparent that the current supply of silver is too nearly stationary, and the surplus European stock too nearly exhausted, to resist much longer the appreciating effect of the old and continuing demand from the East. But if this old demand were re-inforced by the new, great, and increasing demand of the United States, as it would be if specie payments were resumed and silver remonetized in this country, the relative value of the metals would be almost instantly restored.

The opportunity to obtain silver, before the disposable European stock is entirely transferred to the East, ought to be seized upon by the United States. If it is lost by an indecisive and procrastinating policy, no equally favorable opportunity is likely ever to present itself again. Asia never gives up silver. There is no reflux in the current of silver which sets to the East. If this country waits until Europe is exhausted, it may become as difficult to obtain silver for coin payments as it is now to obtain gold for that purpose.

V.

THE POLICY OF REMONETIZING SILVER CONSIDERED IN REFERENCE TO THE RIGHTS, DUTIES, AND SPECIAL INTERESTS OF THE UNITED STATES.

Summary of the monetary laws of the United States.

In 1785 the Congress of the United States, under the Articles of Confederation, adopted the silver dollar as the unit of money. On the 2d of April, 1792, Congress, in the law establishing a mint, enacted that "*The money of the United States shall be expressed in dollars or units,*" the dollar "*to be of the value of a Spanish milled dollar, as the same is now current,*" and contain 371¼ grains of pure silver. The same act fixed the weight of pure gold in the eagle at 247.5 grains, or 24.75 grains of gold to the dollar, which made fifteen pounds of coined silver the equivalent in all payments of one pound of coined gold. In 1834, the weight of pure gold in the eagle was reduced to 232 grains, and, as no change was made in the silver dollar, the equivalency between gold and silver became 16.045 of silver to 1 of gold. In 1837, the quantity of alloy in both the gold and silver coinage was changed, so as to make the coins of both metals nine-tenths fine. The quantity of pure silver in the dollar was not changed, but the quantity of pure gold in the eagle was increased to 232.2 grains, so that the equivalency between gold and silver became 15.988 of silver to 1 of gold. Since 1837 no change has been authorized in the weight or purity of metal in either the gold or silver dollar. It will thus be seen that in the whole history of the United States the weight of pure silver in the silver dollar has never been changed, while the weight of pure gold in the gold dollar has been changed twice.

Gold and silver have been money in this country since its first settlement, by force of the English common law, and the Constitution of the United States recognizes and fixes them as money by the provision that the States shall not make anything but "*gold and silver coin a tender in the payment of debts.*" Congress cannot demonetize either gold or silver, except under a claim to a general authority over the subject of currency, upon which, if it exists at all, there are no limitations, and which may extend to monetizing any form of paper. If Congress can establish a legal tender, it is not prohibited, as the States are, from making anything "*but gold and silver coin a tender in payment of debts.*"

Between 1821 and 1834, when the legal equivalency between the metals was 15 to 1, gold was at a premium in silver of from 5 to 7 per cent., and disappeared from the circulation, and but little was brought to the mint for coinage. The legal relation of value between the metals of about 16 of silver to 1 of gold established in 1834 was an undervaluation of silver. From that date on and until 1874 the silver dollar bore a premium in the London market over the gold dollar of from 1 to 3 per cent. Notwithstanding this premium, silver did not wholly disappear, as gold did between 1821 and 1834, but the quantity in circulation continually grew smaller down to 1862, when both the metals were expelled from the circulation by legal-tender paper. Between 1850 and 1873, whenever payments were made in coin, gold was used because it was the cheaper of the two metals, just as silver was used for a similar reason between 1821 and 1834; but during each of these periods both gold and silver possessed equally the potentiality of money, the metal out of actual use being certain to come again into actual use when the conditions changed.

After 1834, on account of the undervaluation of silver by the coinage law of that year, there was a tendency to export silver rather than gold in the settlement of adverse balances of foreign trade. In 1852 a scarcity of the small coins required in minor transactions began to be seriously felt. To meet this difficulty the act of February 21, 1853, was passed. It provided that the silver coins under the denomination of one dollar should be struck slightly below standard weight, and that the legal-tender function of such coins should be limited to five dollars in any one payment. This expedient, or the equivalent one of slightly debasing such coins, is familiar in the practice of European countries. Previous to the act of 1853 the owners of silver bullion had the right (act of January 18, 1837, section 30) to demand its coinage into any of the denominations of silver coin authorized by law. Before that act the law did not authorize any silver coins except the three-cent piece, which were not of standard weight and fineness, and which were not a legal tender for all sums. Under the provisions of that act, the subsidiary or fractional coins, being underweighted, possessed a mint value above their bullion value, and were permitted to be coined only on Government account. By this regulation the Government made a profit or seigniorage on the subsidiary coinage equal to the difference between its mint and bullion value. But after the passage of this law, as fully as before its passage, the owners of silver bullion had the right to demand its coinage into dollars, whose weight remained unchanged, and which, when coined, were equally with gold a full legal tender. This right was never denied to silver bullion until the passage of the law of February 12, 1873, nor was the legal-tender quality of the full-weighted silver dollar taken away or limited until the adoption of the Revised Statutes in June, 1874.

The act of February 12, 1873, above referred to, is a long act of sixty-seven sections, regulating all the details of the mint. It does not demonetize the old silver dollar or any of the silver coins of standard weight issued prior to 1853. The silver dollar is not named in it, and it would escape casual observation that that dollar was in any way affected by it. Precisely what the act did was to authorize the coinage of silver half-dollars, quarter-dollars, and dimes, below standard weight, and of a new silver coin for Asiatic commerce above standard weight, to be called "*the trade-dollar*," and to prohibit these particular coins, described as "*said coins*," from being a legal tender for more than five dollars in any one payment.

The act contains, in addition, an enumeration of the gold coins, and of the minor coins of base metal, which are authorized. It contained no prohibition, *eo nomine*, of the continued coinage of the old silver dollar, and that it did prohibit that coinage escaped the attentionof the people of the country who were to be so injuriously affected by it, by the generality of the prohibitory words which are found in the seventeenth section:

> No coins, either of gold, silver, or minor coinage, shall hereafter be issued from the mint, other than those of the denominations, standards, and weights herein set forth.

The act of February 12, 1873, did not demonetize or affect in any manner the legal-tender functions of the full-weighted silver coins that had been minted prior to its passage, but the seventeenth section deprived silver bullion of its right of being coined into full legal-tender money, on either Government or private account.

In no section of the act was it specifically pointed out or referred to that the effect of the act was to change the standard of values from gold and silver to gold alone. The title of the act, instead of containing any intimation of the change made in the standard of values, was "*An act revising and amending the laws relative to the mints, assay-offices, and coinage of the United States.*" As comprehensive a title as this would have been required for an act making some insignificant change in the nickel coinage, or in the mode of purchasing chemicals used in assaying.

The act when passed was not read except by title, and it is notorious that this transcendent change in the money system of the country, affecting the most vital interests, was carried through without the knowledge or observation of the country. It was neither demanded by the resolutions of public meetings or political conventions, nor asked for in petitions from the people. As paper money was the actual currency of the country at the time, a coinage act was not likely to attract general attention. In its relation to the question of a single or double standard, it was discussed but little in the House, and not at all in the Senate. The press of the country was entirely unobservant or silent when it was pending and when it was passed, and for more than three years afterward. If it had been generally known that any such vital question as the demonetization of silver was lurking in the bill, it would have aroused the most wide-spreading discussion throughout the country, as is shown by the present debate upon remonetizing it, which is only the same question reversed, and which, it is apparent, will dominate all other public questions until it is settled.

The most striking evidence, perhaps, of the public inattention to the effect of the coinage act of 1873, is the fact that President Grant, who signed it, and who was critically observant of the legislation of Congress, had no knowledge of what it really accomplished in relation to the demonetization of silver, and was still uninformed about it as late as the following October. If the President of the United States, in daily intercourse with the public men of the country, had failed to hear during certainly eight months that the laws no longer permitted money to be coined from silver, it must be true that the ignorance on the subject was general and profound.

In a letter written October 3, 1873, to Mr. Cowdrey, General Grant said:

> I wonder that silver is not already coming into the market to supply the deficiency in the circulating medium. * * * Experience has proved that it takes about $40,000,000 of fractional currency to make the small change necessary for the transaction of the business of the country. Silver will gradually take the place of this currency, and, further, will become the standard of values, which will be hoarded in a small way. I estimate that this will consume from $200,000,000 to $300,000,000 in time of this species of our circulating medium. * * * * I confess to a desire to see a limited hoarding of money. But I want to see a hoarding of something that is a standard of value the world over. Silver is this. * * * *
>
> Our mines are now producing almost unlimited amounts of silver, and it is becoming a question, "What shall we do with it?" I suggest here a solution which will answer for some years, to put it in circulation, keeping it there until it is fixed, and then we will find other markets.

The demonetization of silver, coined and uncoined, was affirmatively completed in June, 1874, by the following section (3586) of the Revised Statutes:

> The silver coins of the United States shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment.

No law was ever passed by Congress of which this language can be considered a revision.

The Revised Statutes were enacted in bulk. They were intended to be a revision merely of the existing laws, without change or introduction of new matter, and Congress was assured by its committee on revision that no new matter had been introduced into them. It was not possible for the members of the committee to have personally verified the exact accuracy of the revision. They must necessarily have relied upon assurances given to them by the persons actually engaged in the work. Whoever may be responsible for this error in the Revised Statutes, the ancient money of the country, instead of being intentionally legislated out of existence by Congress, was revised out of existence.

Great importance of silver in the monetary history of the country.

A very disingenuous and unworthy attempt is made to belittle the importance of silver in the monetary history of the country, and to misrepresent what is intended by its remonetization, by iterating and reiterating the totally irrelevant fact, that one particular silver coin, the dollar piece, was never coined at the mints in large numbers. This fact is of no more importance than the other fact, which is equally true, that the gold coin of the value of one dollar has been minted in only small numbers, and is now not permitted to be minted at all. It is not a particular silver coin, the remonetization of which is demanded, but it is the metal silver, in whatever denominations of coins the law may authorize and depositors of silver bullion at the mints may choose to demand. The reason why they never did demand the dollar piece in large quantities is perfectly well known. It was the great abundance of the Spanish silver dollars, when the mint was first established, and for forty or fifty years afterward, followed by the great abundance of the Mexican silver dollars, both of which were made a legal tender in this country, by tale or count. But while the unnecessary expense was avoided of procuring the coinage of a particular piece, which was already well supplied, it is still true that for 54 years, from 1793, when the mint went into operation, to 1846, both inclusive, there was more full-tender silver coined than gold, the figures being for silver $68,839,014, and for gold $52,344,522. And even from 1834 to 1846, both inclusive, although silver was largely undervalued by the coinage law of 1834, there was nearly as much full-tender silver as gold coined, the figures being for silver $32,763,937 and for gold $40,518,652. The preponderance of silver down to 1847 was even more marked in the circulation than in the coinage. Prior to 1834, all gold coins, domestic and foreign, had disappeared from the circulation in consequence of the premium on gold, which, at the legal relation then existing of 15 of silver to 1 of gold, ranged bewteen 5 and 7 per cent. after 1821, when the Bank of England began gold payments. It was not until after the California discoveries that gold was much used. Prior to that time the reserves of the State banks were almost wholly in silver, and largely in American half-dollars. This is well known to those whose recollection goes so far back, and it is a flagrant perversion of history to deny that silver performed a more important part than gold in the monetary history of this country during the greater part of the time down to 1862, although no silver-mines had been until then discovered and worked in the United States. Gold has predominated over silver in the circulation for a short period only, commencing after 1846, from the outflow of the Russian gold-fields, followed by the outflow from California and Australia, and ending with 1862, when paper issues banished metallic money. During the 84 years, from the opening of the mint to the present time, and during the 70 years from the opening of the mint to the suspension of specie payments, silver predominated for 54 years in the coinage, and still more decisively in use and circulation.

The dollar piece was little called for, not only because it was superseded by the Spanish and Mexican dollar pieces, but because the half-dollar answered all the purposes of the dollar piece, and some purposes which it would not answer. To and including 1846, $58,964,673 were coined at the mint in half-dollars. The non-coinage of the silver dollar piece is of no more importance than the non-coinage, now made absolute and complete by law, of the gold dollar piece. It is no such trifling question as that which now agitates this country; but it is the demonetization of one of the two precious metals, and the striking down of prices to the standard of the other metal alone. It is not the silver dollar, but silver money, in whatever convenient forms the law may authorize and the owners of silver bullion may elect, whose restoration to its ancient and constitutional place is demanded.

It is urged by many that silver was practically demonetized by the act of 1834, which undervalued it; by others, that it was practically demonetized by the act of 1853, authorizing subsidiary silver coins. Although these persons disagree as to dates and causes, they agree in insisting that it was practically demonetized in some way, and at some time before 1873, and that the legislation of 1873–'74 in respect to silver merely gave legal expression to an existing fact. If silver was then already demonetized, the persistency of the efforts to secure the passage of a law to demonetize it appears remarkable. From June 9, 1868, when Mr. Sherman, chairman of the Committee on Finance, made a report to the United States Senate in favor of "*a single standard, exclusively of gold*," to February 12, 1873, no session of Congress went by in which some bill relating to the coinage, to compass that object, did not make its appearance. These efforts did not attract public attention, but the records exhibit them. Watchful and persistent labors are never undergone to accomplish what is already accomplished. The manifest truth is that silver was demonetized in 1873–'74, not because it was already demonetized, but because it was still money and stood in the way of the scheme to establish "*a single standard, exclusively of gold.*" As the essence of money in the Western World is the legal-tender function, it is only by law that anything can be monetized or demonetized, and silver was as completely a money-metal in this country until 1873–'74 as it had ever been. What is loosely spoken of as its practical demonetization at that time, was its temporary disappearance from the circulation, because its market-value happened to exceed its mint-value. Its legal demonetization had no practical effect for the time being, and there could have been no other reason for it than the apprehension, since realized in fact, that the vicissitudes of mining, or the legislation of other countries, might again make silver rather than gold the more available metal, and bring it again into circulation.

Alleged reasons for the law of February 12, 1873, *relating to silver. Effects of the law on public and private rights.*

No adequate or satisfactory reasons for the enactment of the laws of 1873–'74, demonetizing silver, have ever been given. In the brief discussion on the bill in the House of Representatives the principal reason assigned in favor of those sections which interdicted the future coinage of the silver dollar was, that its value was 3 per cent. greater than the value of the gold dollar, and that on this account it could not circulate concurrently with the gold dollar, and that no silver was brought to the mint to be coined for circulation. There certainly could not have been any pressing necessity for legislation prohibiting a coinage which was not asked for, and if it was wise to prohibit the coinage of silver because it could not circulate, it would have been equally wise to have prohibited the coinage of gold for the same reason. Paper money, to the exclusion of both gold and silver, had been the sole circulating medium for eleven years. It could not be urged that the business of the country was subjected to any injury or inconvenience by the fluctuations in the relative value of a metal which was not in use and whose coinage was not demanded. Nor can it be easily comprehended how any harm could have resulted from the retention of the option then undisputed of using either of the metals, neither of which was then in use. Such an option, always valuable, has since become of the greatest importance, and it seems strange that it should have been given away without any consideration.

Nor could it have been a reason for the passage of the act, that in consequence of constant fluctuations in the relative value of the metals the money standard was frequently changing from one metal to the other. Only one such change had ever occurred in the history of the country, and that was not caused by a change in the relative market value of the metals, but by a change in their legal relation by the coinage law of 1834, which, by reducing the weight of the gold dollar, undervalued silver and caused it to be exported.

The law of 1873 was not needed to prevent the Secretary of the Treasury from paying the interest or principal of the public debt in silver, because, under the option which the United States reserved when those debts were contracted, his duty to the country would require him to continue to pay in gold as long as it continued to be the cheaper metal. It cannot be supposed to have been the intention of the framers and supporters of the law to discourage silver-mining, one of the great industries of the country, or to deprive the United States of the debt-paying resource which its newly-discovered silver-mines furnished.

The object of the framers of the law could not have been to strengthen the public credit. The amount of credit which either a nation or an individual can possess, depends upon the strength and extent of the belief among lenders and capitalists that the borrower is both able and willing to meet the exact terms of his obligations. An offer to do more would subject the debtor to well-merited suspicion and distrust. He cannot improve his credit by promising to pay a larger amount of money, or money of greater value, than the terms of the obligations held against him require. The sufficient, best, and only means of improving credit, public or private, is an exact performance of contracts. The debtor that insists upon all his rights and at the same time performs all his duties, is the one most confided in. Credit can be strengthened by fulfilling contracts but not by changing them; by performing old promises and not by making new ones.

Nor could the object of the framers of the law have been to advance the value of bonds already sold and in the hands of purchasers. It would be of great public importance to enhance the value of bonds which the Government was proposing to sell, but to overload the country with additional burdens for the purpose of enhancing the value of outstanding bonds, would be to subserve gratuitously and unjustly private interests at the public expense. It would be very gratifying to national pride to have the bonds of the United States now in private hands command the highest prices in the markets of the world, but it could scarcely be deemed a wise financial policy in the present condition of the country to obtain that gratification by paying a premium for it. If, however, it were deemed advisable to enhance the value of bonds already sold, it should have been done by some plain and direct method, and in such a way that the country might know exactly what it was going to cost—as, for instance, by increasing the principal or rate of interest of outstanding bonds. It should not have been done by the indirect method of changing the medium of payment from gold or silver, at the option of the Government, to gold alone. The additional burden which that might impose, from a rise in the value of gold, is incalculable.

The wisdom of refunding the public debt before maturity, by retiring old bonds with the proceeds of the sales of new ones bearing a lower rate of interest, would be unquestionable, if the new bonds were issued on the same conditions and terms as the old ones. But if the new bonds are to run on a long time, and are to be payable only in the rapidly-appreciating metal, gold, instead of optionally in gold or silver as the old bonds are payable, it would be wiser not to refund at all. The country can better endure the present rates of interest than an indefinite increase in the value of the money in which the principal of its debts is payable.

If the gold obtained by the issue of a bond payable only in gold was used to purchase silver wherewith to pay off the 5-20 bonds, which can be paid legally and equitably in silver as well as in gold, the country would gain the present difference between the currency prices of gold and silver. Such a gain would not justify the great and unknown risk of a long-time promise of gold, but it would be worth something. But if the gold borrowed on gold bonds is to be applied directly to the payment of the 5-20 bonds, and the saving of converting it into silver for their payment is gratuitously thrown away, the operation would be, in all its aspects, a marvel of folly.

The defense most frequently made for the demonetizing act was, and is, that the silver dollar had been substantially out of circulation for twenty years. But those who make this defense forget that, until demonetized, it had always possessed all the functions of money and served as a sure protection against any considerable rise in gold. It bore a premium of only 3 per cent. in 1873, and if coin payments had been resumed then gold could not have risen more than 3 per cent. without bringing the silver dollar into immediate use. It was, when demonetized, standing guard against a rise in gold. To divest either metal of the money function because temporarily out of use would be reckless and unwise. As well might the commander of an army while a battle was raging disband and discharge his reserves because they were not engaged at the front. As well might the master of a ship cut loose and scuttle his lifeboats because the sky was clear and the sea calm, or because the transfer of passengers and crew from ship to boats might cause some inconvenience.

Duties and rights of the United States in respect to its coin obligations.

All the debts of the United States, when any special medium of the payment of either interest or principal is expressed, are made payable either in paper money or "*in coin*," but never in gold. The 5-20 bonds issued under the act of February 25, 1862, were made payable—the principal in dollars, without specifying the kind, and which might mean dollars in paper or coin, and the interest in coin; and, in order to secure the coin for paying the interest, the act specially appropriates the customs duties, and provides that they shall be collected "*in coin*" only; which includes silver as well as gold coin. The latest and still continuing law in respect to those duties, which is found in section 3473 of the Revised Statutes of 1874, declares that they may be paid in "*gold and silver coin.*"

The act of March 3, 1863, under which the 10-40 bonds were issued, makes both the principal and interest of those bonds payable "*in coin.*"

The well-known declaratory resolution of March 18, 1869, to "*strengthen the public credit,*" makes no promise of gold, but expressly recognizes "*gold or silver*" as constituting the "*coin*" promised in prior acts. The special pledge of the law of March 18, 1869, is that all national obligations shall be paid in "*coin* or its equivalent," except those in respect to which it may have been "expressly provided that the same may be paid in lawful money, or other currency than *gold or silver.*"

The act of July 14, 1870, under which the national debt is now being refunded, provides for payments, not in gold, but "*in coin,*" and the only new provision which it contains is that payments shall be made "*in coin of the present standard value.*"

Bonds issued under the act of July 14, 1870, have printed on them the following words:

> This bond is issued in accordance with the provisions of an act of Congress entitled "An act to authorize the refunding of the national debt," approved July 14, 1870, amended by an act approved January 20, 1871, and is redeemable at the pleasure of the United States after, &c., in coin of the standard value of the United States on said July 14, 1870, with interest in such coin.

On the 14th of July, 1870, the silver dollar contained 412.5 grains of standard silver, and was the legal equivalent of the gold dollar, which then contained, as it does now, 25.8 grains of standard gold. Both the silver and gold dollars were invested with the same function as money, and were equally a legal tender for all debts, public and private, and for all sums. Any person having either gold or silver bullion had the right to deposit it at the mint, and have it coined for his account, in the order of its presentation, into full legal-tender money, and, being so coined, it became coin of the "*present standard value,*" as intended by the act of July 14, 1870, and in which bonds issued under that act may be legally paid.

The right to demonetize gold rests on the same foundation as the right to demonetize silver, and the right to demonetize both is as well assured as the right to demonetize either. It is not disputed that the United States may change at will either the weight or the purity of the metal in its coins. It might make its coins $\frac{7}{10}$ instead of $\frac{9}{10}$ fine, or might make the gold and silver dollar, or unit of value, contain more or less gold and silver respectively than was contained in the gold or silver dollar of the standard value of July 14, 1870. But neither the demonetization of one or both of the metals, nor a change of weight or purity of metal in either gold or silver dollars, could either deprive the country of any of its rights or relieve it of any of its obligations in respect to bonds issued under the act of July 14, 1870. Nor could such legislation build up any new rights or break down any old ones of the holders of bonds issued under that act. The very terms, "*coins of the present standard value,*" used in that act to describe the medium in which bonds issued under it were payable, implied not only the power of the Government to change the "*standard value*" of its coins as existing July 14, 1870, but the probability that such changes might be made. What the act does is to protect the holders of bonds issued under it from being affected by such changes. Those bonds hold the United States, not to pay dollars of such weight, purity, and material as may constitute coin of the standard value when the interest or the principal of the bonds falls due, but to pay, at its option, in dollars of either gold or silver, of the weight and purity of "*coin of the standard value of the United States on said July* 14, 1870." If the United States should make its money to consist of paper, or of platinum coins, such as were formerly minted in Russia, it must still provide gold or silver coins for the holders of bonds issued under the act of July 14, 1870, and of the "*standard value*" existing on that day. If the United States should hereafter diminish by one-half the weight of pure metal in the gold and silver dollar respectively, the rights of the holders of those bonds could not be prejudiced thereby; neither could the rights of the Government be prejudiced under opposite conditions. Under all circumstances the holders of those bonds have the clear right to demand coin of the "*standard value*" of July 14, 1870; and equally clear is the right of the United States to pay in coin of gold or silver, at its option, of that "*standard value*." These rights are the correlatives of each other and must stand or fall together. If the Government should refuse to pay bonds issued under the act of July 14, 1870, in coin of the then "*standard value*," it would be a repudiation of the rights of the bondholder. If it should deny to the nation its option of selecting for such payment either gold or silver coin of the "*standard value*" of July 14, 1870, it would be a repudiation of the rights of the people.

The object of the act of July 14, 1870, was to refund the public debt at lower rates of interest, and the framers of the act naturally desired, so far as they could properly do so, to make the terms of the bonds authorized by it acceptable to the classes of persons most likely to subscribe for them. It is a well-settled rule of law in this country that public and private contracts to pay dollars, without a specification of any particular kind of dollars, are satisfied by the payment of whatever may be legal dollars when the contracts mature. The principle of this rule is recognized among all civilized nations. In view of this well-known rule, and in order that the rights and duties of both the Government and the bondholder should be specifically defined, the promise of prior acts to pay "*in coin*" was changed in the act of July 14, 1870, to a promise to pay in "*coin of the present standard value*." This change insured the purchasers of bonds issued under it against being paid in coins of a different standard value; but not less clearly did it insure to the people of the United States the privilege of paying, at their option, in any of such coins. If the new language holds the United States rigorously to pay in such coins, not less rigorously does it hold the owners of the bonds to accept them.

The United States owes no debt either contracted or payable in Europe, although its bonds, payable at home, are largely held there. It has created no foreign debt since the revolutionary war. All its debts and bonds are payable in this country and in dollars. The law gives no advantage to the creditors of the United States who live in foreign countries over creditors who reside in this country. They occupy exactly the same position, equitably and legally. Many attempts have been made to induce Congress to authorize the issue of bonds payable in foreign countries and in foreign money, but such attempts have never succeeded, except in the single instance of one small loan, (United States

Statutes, vol. 12, p. 260,) which was authorized but never negotiated. Europeans and all others who purchase United States bonds do so voluntarily, and exclusively for their own profit and advantage, and not for the profit or advantage of the United States. They purchase them with a full knowledge of the laws which authorize their issue and specifically set forth their terms. The laws are open to the examination of all, and no one has the right to plead ignorance of them as a reason for perverting in his interest their plain meaning. No bond has ever been issued without having printed on its face a reference to the law authorizing it, together with a substantial statement of its terms. It is incredible that any bonds have been purchased without a full knowledge of their terms on the part of the purchaser; and, be that as it may, the United States, in dealing with its debts, must be governed strictly by the laws authorizing them. These laws were intended not less scrupulously to protect the rights of the nation than the rights of the bondholder, and no safeguard of the interests of the nation can be lost because it was overlooked by careless creditors.

The legal right of the United States to pay its bonds in gold or silver, at its option, is so clear that no serious denial of it is made. The claim that they should be paid only in gold is placed on vague and shadowy grounds. So far as it is possible to apprehend these grounds, they are, that when these bonds were issued silver was out of use as money; that the larger part of those held abroad at the present time are held in countries which do not recognize silver as money; that whenever coin has been paid for these bonds, it has been gold coin and not silver coin; and that the purchasers expected to be paid in gold; and that on account of these considerations both equity and honor demand that they should be so paid. The truth is, that gold has been as much out of ordinary use in this country as silver during the whole period covered by the negotiation and sale of these bonds, and that Germany, where the earliest and largest purchases of them were made, did not recognize gold as money until December, 1871, and has now quite as much silver as gold in its circulation. Down to 1873 the coin purchasers of the bonds did not forget that they had an option between silver and gold money, nor did they fail to exercise that option by selecting gold, which was the cheaper of the two metals, as their medium of purchase, nor should the Government now forget that it has the same option, and that it would be worse than weakness not to exercise it by selecting the cheaper of the two metals as the medium of payment. Those who purchased bonds with gold when it was the cheaper metal, could have expected to be paid in gold only so long as it continued to be the cheaper metal. If they have been disappointed in what has since happened, it is in the fact that silver has become the cheaper metal. They always knew that the United States had the same option of paying in the cheaper metal which they had themselves exercised in purchasing. They may be somewhat disappointed to find that this option cannot be taken away by any legislation subsequent to the dates of the contracts which they hold, and that the step from coin to gold is a more difficult one to take than the step from currency to coin, for which the congressional resolution of March 18, 1869, seems to have been sufficient.

The attempt to frighten the Government from exercising its undoubted right to pay its bonds in the cheaper metal, by proclaiming that if it does so its honor will be tarnished and its credit impaired at home and abroad, is unworthy of consideration. The punctual fulfillment to the letter of all obligations is the surest and best support of the credit of any country. Its honor can rest permanently, in peace and in war, only on the patriotism of its people, which is sure to be weakened if their substance is taxed to pay premiums for the applause of its creditors. The United States is the only nation that has never made a default in its promises. It has never failed to meet punctually and fully all its obligations. It is nearly a hundred years since its Government was formed under the existing Constitution, and if it has not acquired a perfect credit by the scrupulous fulfillment during that time of all its obligations, it cannot hope to acquire such a credit by anything that it can do hereafter. Within that time it has seen the strongest governments in Europe make default in the payment of their obligations. Even Great Britain, for many years during the present century, paid the interest of its public debt, a large proportion of which had been contracted in coin, in inconvertible bank notes, whose depreciation reached sometimes as high as thirty per cent. While nearly all nations have on various occasions met their obligations in a money less valuable than they agreed to pay, the Government of the United States stands alone and pre-eminent in the generosity and in the folly of paying in a money more valuable than it agreed to pay. The only compensation which it has received for the added burdens thrown upon its citizens by an over-performance of its contracts is the interested praise of those benefited, which is as insincere as it is interested. Those who obtain an unjust advantage have a real contempt, however concealed, for the weakness that concedes it. That sensitiveness, so morbidly manifested by some in respect to the estimation in which this Government may be held by its creditors here and abroad, and their indifference as to the estimation in which it shall be held by the great mass of its own citizens, instead of being evidence of proper national pride, is an exhibition of weak and puerile vanity. That sentimental idea of honor which requires the abrogation of the plain terms of a written contract by one of the parties to it, against its own interest and at the demand of the other party, while suited to youthful fancy and refreshing in the pages of cheap literature, should find no place in official interpretations defining the rights and duties of a nation under contracts whose written terms are so precise as to exclude implication.

A written contract must be construed in accordance with its expressed terms. Any other method of interpretation would be the source of endless confusion and injustice. This is especially true of written contracts between a government and its creditors. As no tribunal exists to decide the equities between them, the question of equity and honor cannot be safely opened by a government. It could only decide on such equities as might be adverse to itself, while the creditor would insist on the equities of the contract when in his favor, and on the terms when the equities were against him. Suitors before chancery tribunals are bound by the rule that those who seek equity must do equity. In this case, there are many and strong equities on the side of the United States. During the civil war its bonds were sold at par for paper which was worth as little as forty cents in gold or silver on the dollar. In respect to the bonds sold since the civil war for metallic money, such money greatly appreciated after the sales, and is still appreciating. If the United States, on account of either of these circumstances, should reduce the amounts nominally due on its bonds, it would be charged with dishonor and repudiation. There is no court to which it can present these equities, and it therefore cannot entertain the vague, doubtful, and far inferior equities urged in behalf of its creditors.

The honor of the Government was no more sacredly pledged to the bondholder, that the principal and interest of bonds issued under the act of July 14, 1870, should be paid in coin of the standard value of that date, than it was to the people that they should have the option and privilege of paying the bonds issued under that act in either of the classes of coin of the standard value of that date. There are two parties to these contracts, the bondholder on the one side and the masses of the people on the other. The rights of the one are as sacred as the rights of the other.

In the case of the Government, the arguments against enlarging the terms of its written contracts, to satisfy the claims of an imaginary honor, are even stronger than in the case of individuals. The proposed gratuities to bondholders are not to be paid by those who hope thereby to obtain a meretricious applause, but are to be made at the expense of posterity, the mortgage upon whose earnings is to be changed to their prejudice after it has been recorded. The burdens thrown upon individuals are borne by them personally or by their existing property, but the burden thrown upon a nation may be extended to an indefinite future. To mortgage the labor of posterity and coin it into money for present wants is a doubtful right at best. Until lately it has been an established canon of American political doctrine that no generation can bind its successors, and that every public debt must be paid off during the generation which created it. At all events, no attempt should be made to impose burdens on posterity, unless commensurate benefits are conferred with them, and to increase gratuitously such burdens in order to gratify sublimated notions of honor is as indefensible in morals as it is in law.

The United States reserved the option of paying its debts in either metal, as a protection against any combination of circumstances, and against any legislation of foreign governments relative to the precious metals which might cause a divergence in the relative value of gold and silver. This option, always important, and doubly so when a divergence exists, has always been exercised by the United States, and its right and duty to exercise it is as clear to-day as it has ever been since the formation of the Government. It was a powerful and persistent creditor influence that caused the demonetization and consequent depreciation of silver relatively to gold. The masses of the people, including the debtors of all countries, were opposed to it. If it were true, as it is not, that creditors would now suffer loss if paid in silver, they should receive no sympathy, nor should they complain of the legitimate consequences of their own acts. The bonds of the United States are supposed to be more largely held in Germany than in any European country. Germany had the single silver standard until 1871, and by discarding it and adopting the gold standard became the principal cause of the recent divergence between the metals. The subjects of the German empire cannot justly complain of a payment in silver depreciated by the action of their own government.

If individuals or syndicates, who have made contracts for the purchase of bonds of the United States at fixed prices, and whose profits and commissions depend upon the prices at which they make sales, have made representations as to the tenor and meaning of the bonds not warranted by law or by the language of the bonds, the United States cannot be held responsible for such statements. That is a matter purely between them and their customers.

The only safe course for both parties to these bonds is to abide by their plain letter and by the laws which alone give them any validity whatever.

Large national debts, contracted under the pressure of war, are generally contracted on hard terms. There is a temptation to scale them down afterward to more equitable terms, and a provocation to that is given if the holders of such bonds attempt, by influencing legislation or otherwise, to secure new and still better terms for themselves long after the loans are made. Their strongest and best position is to stand upon the sacredness of contracts, and they may lose a portion of what is now conceded to them by seeking more than their contracts entitle them to.

The act of July 14, 1870, pledged the Government of the United States to pay the bonds issued under it in dollars coined at its option out of either gold or silver, and that the dollars coined of gold should each contain 25.8 grains nine-tenths fine, and that those of silver should each contain 412.5 grains of the same purity, and that for the purpose of such payment no other or different dollar from those described should be used. But that act did not, nor could it, bind the Government to retain either kind of dollar, or either gold or silver, as money. It, in effect, pledged the Government to pay those bonds at its option in one or the other of the classes of dollars described, whatever its money might be. The question of what its money shall be is a domestic question always within the sovereign discretion of the United States, and in respect to which it never did and never can give pledges for the future.

The United States might decide to demonetize gold as well as silver, and to maintain and enlarge the circulation of paper. The effect of this would be to lower the value of both metals, by withdrawing any demand for them as money in this country, and by setting an example of disusing them, which might be followed elsewhere. Just as a large demand for gold here as money must raise its value and increase the burden of debts payable in gold, so the disuse of the metals here would cheapen them and diminish the burden of debts payable in them. The Government of the United States has never come under obligation to its creditors or anybody else to retain either of the metals as money. After demonetizing them, however, it would still be its duty to coin them for the purpose of complying with the terms of bonds issued under the act of July 14, 1870. Of the striking of coins for special purposes, we have examples in the subsidiary silver coins and in the trade-dollar. The question of remonetizing silver has no connection whatever with the right or duty of using silver in payment of the coin obligations incurred under that act, but it does directly affect the interests of the holders of such obligations. The remonetization of silver in this country would, by giving it a new and large use, cause it to increase in value, which is of great importance to the holders of bonds which, according to their conditions, are payable in either gold or silver, at the option of the United States. The holders of such bonds are the last persons who should oppose the remonetization of silver.

For even if silver is not remonetized, it can hardly be supposed that the Government of this country will be so untrue to the interests of the nation confided to its charge as to give up, or fail to exercise, the option it has of paying the bonds in silver, or that authority will not be given and exercised to coin silver for that, even if for no other purpose.

If positions were reversed and if the Government was the holder of these bonds, it would be regarded as a violation of the letter and spirit of the agreement, and a repudiation of honorable obligation, if it should neglect or refuse to coin, at the will of the debtor, either of the metals in which the bonds were payable. A rule, to be equitable, must work both ways.

The promise of the United States to the purchasers of bonds under the act of July 14, 1870, is not to pay money, but to pay "coin" of the then "*standard value*," meaning of the weight and fineness of the gold and silver dollars then being coined at the mint. Both parties took the risk of the fluctuations of the metals. The United States received no guarantee against their rise, and gave no guarantee against their fall. The assumption that the agreement of the United States was to pay coin of the then market or commercial value is to the last degree absurd. The United States agreed to pay a specific thing, not a specific value. There is no tribunal to determine what the changes are in the market or commercial value of dollars. No prudent government or individual would give an obligation so shadowy and indefinite, and no prudent capitalist would accept such an obligation.

In issuing bonds under the act of July 14, 1870, the United States took the risk of a rise in the value of both the metals. The parties accepting the bonds took the opposite risk of a fall in the value of either of them. The chances against the United States were wars and political disturbances in the mining countries, such as caused a decrease in the production of gold and silver between 1809 and 1848, or that the mines would be from any other cause less productive, or that countries not using gold or silver might decree their use as money, and thus make a new demand for them, or that a change of fashion might increase the consumption of the metals in the arts. Either of these circumstances, or all combined, might raise the value of the metals very materially. On their part, those who accepted the bonds took the risks of an increased production of either or both of the metals by the discovery of new gold and silver mines or by the more vigorous working of old mines, or that commercial countries *might demonetize one or both of the metals*, or that great amounts of gold or silver might be liberated by the suspension of specie payments in important countries, or that the habits of the world might be so changed that less amounts of gold and silver would be used for other purposes than as money. Either of these circumstances, or all combined, might depreciate the value of one or both of the metals very materially.

One fact, not a matter of chance but of reasonable certainty, operates steadily against the United States. This is the advance of the world in population, wealth, and exchanges, and the consequent requirement of more money, with no certainty that the mines will produce more.

The risks were and are mutual. Is it supposable that, upon the occurrence of any or all of the circumstances which would tend to raise the value of both metals, and thereby increase the burden of obligations payable in them, the United States would ask or that the bondholder would agree to a corresponding scaling of the contract? Has a bargain been made where the creditors, under all vicissitudes, stand to win and not to lose? Is the United States bound to the obligations and penalties of the contract, and debarred from all the advantages conferred by its terms? These interrogatories admit of but one reply.

There is no dispute about the facts of the case or the law. A contract has been entered into between the Government and its creditors, involving contingencies which may favor either party, and both parties must abide the issue, whatever it may be. It would be beneath the dignity of the Government to demand any advantages which the law and the contract made under it do not confer. It would be a violation of justice and a betrayal of the great interests confided to its charge to accept anything less. The Government is an agent and not a principal. It is the trustee of the nation, and must find the charter and guide for the administration of the affairs intrusted to it in the law and not in sentimental emotions.

The creditor would have no reason to complain of either the law or the fact if he were now paid in silver. The contingencies which have happened have not been favorable to the United States, but otherwise.

Not only has the value of both the metals risen, but a comparison of gold prices in 1870 with silver prices in 1877 will show that the purchasing power of silver is greater now than the purchasing power of gold was then. Payment to-day in silver would not only give the creditor all that he is entitled to under the law and the contract, but would mete out to him more than equity alone would demand.

It is sometimes said that the more recently-issued bonds should be paid in gold, because the United States receives gold for them. The obligations of a bond are not governed by the price, or the species of money, or the nature of the consideration received by those who issue it. They are governed by the terms of the bond, and not by what it is sold for. A bond sold at 105 can have no other construction than a similar bond sold at 50, and a bond sold for gold can have no other construction than a similar bond sold for silver or greenbacks or given in payment for supplies or services. The promise, and not the consideration, governs. If it were really true that what is received for bonds determines what they promise, the holders of a majority of the outstanding bonds of the United States would be in a much less favorable position than they now occupy.

Indebtedness of the United States to Europe and trade relations with Europe.

We are largely the debtors of Europe, a relation we do not occupy toward any other quarter of the globe. The aggregate of our indebtedness, public and corporate held there, is estimated to exceed $2,000,000,000 and is, on any computation, an immense sum. If it be taken at $2,000,000,000, the annual interest must be fully $100,000,000. This is the minimum of the current estimates. It is not a tribute, in the odious sense of a contribution exacted by a sovereign or imposed by a conqueror, but in its financial effects does not differ from either, and there has never been any parallel to it in history, ancient or modern. In the recent and continuing discussions in Great Britain it is treated as a capital and dominating fact relative to British India that India is obliged to pay annually in London £15,000,000, or $75,000,000, partly as interest upon loans and partly for expenditures of the Indian administration in England. But India has a population five times greater than that of the United States, and its London payments are in larger proportion for interest on money expended in productive works than is the foreign interest-account of this country. No part of our national debt, which is so largely held abroad, arose from investments in productive works.

We occupy still another relation to Europe. It is the principal purchaser of our agricultural staples, of our petroleum, and of the raw products of our forests. So long as we export those articles Europe will be our chief customer. It has the manufacturers to buy our cotton, and a dense population whose demand for food and raw products of various kinds cannot be supplied at home. For a long future we shall find there the principal foreign market for our timber, petroleum, cotton, cereals, tobacco, rice, beef, pork, and dairy products, and it is from the proceeds of these commodities that the interest on our debts held in Europe must be and is really paid. And it is with those countries which now have the gold standard, or have taken steps in that direction, and pre-eminently with Great Britain, that we have these relations of trade.

Two modes of resuming coin payments in this country are proposed. One is under the single standard of gold; the other is under the optional standard of gold and silver.

If we resume specie payments in gold alone, the quantity needed will be very great, and we must either withdraw it from Europe or intercept gold that would otherwise reach Europe, which would amount practically to the same thing. To whatever extent coin payments in gold require more gold than coin payments in gold and silver would require, to that extent the competition for gold between the United States and Europe will be made more severe, and the drain of gold from Europe will be greater, with the unavoidable consequence of a fall in Europe of the gold-prices of all commodities. This would be disastrous to the masses of the people of this country, even if the merchandise imports and exports in the European trade were equal. The producers of the staples sent to Europe include the entire agricultural interest, and far exceed in numbers the consumers of European goods. But merchandise imports and exports in the European trade are not equal, on the contrary, the excess of exports is very large, and must be so as long as the United States has a large annual interest-account to pay in Europe. Comparing for the two last fiscal years, ending June 30, 1875 and 1876, the merchandise imports and exports with all European countries, the following results are shown:

Years.	Imports from Europe.	Exports to Europe.
1875	$281, 234, 787	$452, 432, 255
1876	232, 133, 822	498, 558, 300

The trade with Great Britain, which is a gold-standard country, shows the following even greater proportion of exports, exclusive of gold and silver:

Years.	Imports from Great Britain.	Exports to Great Britain.
1875	$155, 297, 944	$371, 745, 682
1876	123, 373, 281	368, 900, 324

Falling prices in Europe, and especially in Great Britain, imply diminished returns for the same quantities of our exports to that continent, and a corresponding increase of the real burden of paying the principal and interest of our debts held there.

If the United States should resume specie payments under the optional or double standard, silver would always constitute a part of our currency. The channels of circulation would doubtless for a short time, and until the new demand here for silver caused the legal and market relations of the metals to coincide, be monopolized by silver and by such paper as might be convertible into the metals. It would, therefore, not be necessary to resumption to draw gold from Europe or to intercept it on its way there. Even if the gold now in this country, or some portion of it, should be sent to Europe, it would be sent where it would be of the greatest possible service to us, and where it would have a direct influence in raising the prices of our exported products. These prices are not regulated or controlled by the volume or kind of money in use in this country, but by the volume and kind of money used in the countries to which our products are exported. A gold-standard here will force a fierce scramble with Europe for gold. This would straiten our largest customers, diminish their means and disposition to make purchases, and lower the prices of our products in European markets. Last year our merchandise exports to Europe (principally agricultural staples) were $498,558,300, of which Great Britain received $368,900,324. By retaining, instead of sending to Europe, any given sum of gold, the United States would be obliged to export that additional amount of products, and to suffer also whatever percentage of diminution in the prices of $498,558,300 of products such a withdrawal of the gold-supplies of Europe would occasion. On the other hand, to whatever extent we employed silver as money under the double standard, we could add to the gold supplies of Europe, and proportionally raise the prices of $498,558,300 of our products sold there. It is indeed hardly possible to conceive of a financial policy more clearly and largely ruinous for the United States than one which would raise the value of the money in which our foreign debts must be paid, and decrease the prices in such money of our exported products.

Before the British Royal Commission of 1868 on International Coinage, Jacob Behren, esq., an eminent British merchant and member of the Associated Chambers of Commerce, after answering special and technical questions, was asked, in conclusion, "*if there was anything else he wished to state.*" His reply was (p. 13:)

> I would only state that, in my opinion, the general introduction of gold all over the world has been one of the greatest possible blessings to England. I believe that England would be now the very poorest country in the world if the silver standard abroad had been kept up, and gold had not been generally introduced. Gold would otherwise have been very much reduced in value, and we should have had all the gold poured into England. All the debts owing to us would have been paid in the depreciated currency; and, therefore, I believe that England ought to have taken the lead in the introduction of a gold currency abroad. We ought to be very thankful that it has been introduced, and we ought to give every facility to its circulation.

The activity of the advocates in this country of the gold standard has relieved England from the necessity of openly taking "*the lead in the introduction of a gold currency*" into the United States.

The resumption of coin payments.

A transition in this country from paper to coin involves a struggle for the needed coin with other countries, no one of which has any that is not all urgently needed for its own payments, prices, and necessities. The United States will be at the disadvantage of struggling for the coin of which other countries are in possession. It can be successful only by a reduction of prices in this country, not merely to the present level of coin-prices throughout the world, but to that lower level to which they must descend under such a new and great demand for coin as the resumption of specie payment in this country would occasion. This crash in prices cannot be avoided by confining our demand for the metals to the product of our own mines. That product is a part of the current supply of the world, and to subtract from that supply is the same thing in its practical effect as subtracting from the stocks of the world, because the entire current supply is not more than sufficient to keep the existing stocks unimpaired. It cannot be avoided by borrowing coin abroad upon our bonds. No such borrowing will be permitted to reach the gold of the great European banks, and must be confined to the small quantities floating in commercial hands. But the decisive consideration is, that even if gold should be obtained in that way, it could be kept here upon no other condition than a reduction of our prices to or below the coin-prices of the world.

The difficulty of obtaining gold in that way was pointed out in the Senate of the United States January 22, 1874, by Governor BOUTWELL, who had been recently at the head of the Treasury Department. He scouted the proposition that it was possible to obtain even $100,000,000 in gold by the sale of bonds for resumption, or for any other purposes. Referring to a proposition to transfer to this country from London only $21,000,000 in gold, he said:

> The Bank of England, foreseeing that there would be an accumulation of coin to the credit of the United States which might be taken away bodily in specie, gave notice to the officers of the Treasury Department of the United States that the power of that

institution would be arrayed against the whole proceeding unless we gave a pledge that the coin should not be removed and that we would re-invest it in the bonds of the United States as they were offered in the markets of London. We were compelled to comply. It was in the interest of the Government that we should do so, because we did not want the coin, and we did want the bonds. But it shows the feeling that animates that central financial power of Great Britain, and it shows a policy on the part of that institution, and of every kindred institution on the continent of Europe, sustained by all the banking and commercial classes, by which, if it were necessary, and this proposition should become a law, the bonds of the United States would be excluded from the stock markets of every financial city. There are in the nine great banks of Europe only $600,000,000 in specie. That specie is held as a reserve with reference to their local business and with reference to the great transactions that take place between the countries of the continent of Europe and Great Britain. I may say, without disparaging the authors of these propositions, that it is useless for Congress to waste time upon legislation looking in that direction. There is another fact known to all. We recovered at Geneva an award against Great Britain of $15,500,000. When this claim was maturing the banking and commercial classes of Great Britain induced the government to interpose, and by diplomatic arrangements through the State Department here, operating upon the Treasury Department, secured the transfer of securities, and thus avoided the transfer of coin. In the presence of these facts, is it to be assumed for a moment that we can go into the markets of the world and purchase coin with which we can redeem four, three, two, or one hundred million outstanding legal-tender notes?

When a drain of gold sets in, the Bank of England raises its rate of discount until it makes money scarce enough, and reduces the prices of commodities low enough, to arrest the drain. This is a necessity for its own preservation, to which it must sacrifice everything else, not excepting its own customers. It is unfortunately too plain how the United States, depending upon the European prices of its commodities for the means to pay its debts, must fare in a contest for gold with the banks of London and Berlin.

And so far as it is true, as it doubtless is to some extent, that our indebtedness to Europe is paid from the sale of commodities elsewhere, the United States, as a debtor country, is interested against such a diminution of the world's measure of values as would result from demonetizing silver, and ought to throw the weight of its example and influence against it.

Every additional employment for gold increases its value, and it must be an unwise policy for the United States, owing large debts held in gold-standard countries, and many of them specifically payable in gold, to make a new demand for that metal, of from three to five hundred millions of dollars, by adopting an exclusive gold standard. The interests to be subserved by such a policy are not American interests, but those of the gold-standard countries of Western Europe, and especially of England, which are to an enormous extent the creditors of the United States and of other parts of the world.

Upon this general statement it is apparent that a struggle for a given quantity of both the metals must be less severe than a struggle for the same quantity of a single metal. The needed quantity is a less percentage of the stock of both metals than it is of the stock of either. The whole world can be drawn upon for both, while only a part of the world can be drawn upon for one; and if the single metal sought for is gold, it is only the smallest part of the world which can be drawn upon.

The actual and legal money of the United States is now, and has been since 1862, paper issued by the Government. It owed its origin to exigencies growing out of the civil war, and to the belief that it was necessary for the preservation of the Government. The law authorizing its issue has been decided by the highest judicial tribunal to be warranted by the Constitution. It owes its value to the demand of the population of the country for money, and not to the indefinite promise to redeem it in coin. The value of each unit or dollar, population and productive forces remaining the same, depends upon the number of such dollars issued and occupying the channels of circulation. It is not disguised that it will be an extreme hardship to compel those who have borrowed paper, or have become indebted by purchases at paper prices, to liquidate their obligations in coin. It is not a good answer to this to say that if debtors suffer in this way now, creditors suffered in an inverse way fifteen years ago. The answer would be a better one if it could be truly said, as it cannot be, that the debtors who are now to suffer are the same persons who made a corresponding gain fifteen years ago, and that the creditors who are now to gain are the same persons who then suffered a corresponding loss. An injustice to one class of persons is neither remedied nor compensated by inflicting an injustice upon another class. The only ground upon which a resumption of coin payments can be justified is that it is absolutely essential to the public welfare. If resumption is demanded, it is by policy, and not by equity. No man's equities are impaired by a continuance of the present state of things. There is no holder of greenbacks who cannot get as much as he gave for them. If prices have been inflated in this country, it was caused by an excessive issue of legal-tender paper, resulting from the real or supposed necessities of the Government. No particular class can be charged with being responsible for it. Those who now find themselves crushed beneath a load of debts through falling prices brought about by a contraction of the currency cannot be justly taunted with previous recklessness, because they transacted business in prices regulated by forces over which they had no control. As the debtors of the country are not more responsible than the creditors for the suspension of specie payments, the burdens of resumption should not be imposed on them alone. It is claimed that resumption is necessary for the welfare of all. Whatever sacrifices may be necessarily attendant upon it should therefore be, as nearly as possible, equitably shared by all.

Under any plan of resumption there will be hardships and benefits, and they will be unequally distributed. But the plan selected should be such a one only as would subject existing equities and interests to the least possible disturbance. A transition from a standard of paper to one of gold will hardly be claimed to be such a method of returning to coin payments as would best mitigate the unavoidable hardships incident thereto. And so far as it aggravates them, it is an aggravation called for by neither honor nor duty. When the suspension of specie payments took place all obligations were payable in either of the two metals, gold or silver, at the option of the debtor. It would be manifestly inequitable to resume without an option and in one metal. Resumption of specie payments under the double standard is the utmost that can be claimed by creditors at home or abroad. Even such a resumption would not preserve existing equities, but would impair them less than a resumption in the more straightened standard of gold. Even if it were conceded that a gold standard is abstractly the best, and ought ultimately to be adopted, the present time is most badly chosen for such a measure. The sufficiently difficult step from paper to coin should be first taken, to be followed by the step from coin to gold, at some opportune moment to be indicated by subsequent events.

The restoration of the double standard seems to be the most efficacious, and, for the present, the indispensable measure to bring about a resumption of specie payments. To convert all the vast and ramified paper debts of this country into gold debts, and to do this when a similar change in the monetary system of Germany is still uncompleted and in progress, so that we must be forced into a contest for gold with that rich and populous empire, will involve such ruinous hardships when it is seriously attempted, that it is impracticable under institutions that rest upon the popular will. England was able to do it fifty-six years ago, but the government of that country was then far less a representative one than it is now; and strong as it was, it was substantially revolutionized by the reform bill of 1832, which was forced upon the Government by the people, made desperate by the suffering and misery inflicted on them by the gold policy of 1821. The government of Germany, essentially military, and flushed and strengthened by successes in many respects without a parallel in a recent war, seems equal to the task, but even there popular discontents are threatening and portentous. Neither the English nor the German experience justifies the belief that the policy of an arbitrary and uncalled-for contraction of the currency is practicable in this country. When the law of January 14, 1875, was enacted, requiring coin payments on the 1st day of January, 1879, it was known to but few persons in the United States that silver had been demonetized. The general knowledge of that fact is, indeed, much more recent than January 14, 1875. The people of this country were in no way consulted in respect to this transcendent measure of making debts solvable only in a single metal, the control of the value of which rests substantially with the three banks of England, France, and Germany, which possess nearly the whole of the disposable stock of that metal.

Notwithstanding the extraordinary supplies of gold since 1848 from California and Australia, supplemented more recently by new supplies of silver from Nevada, a majority of the commercial nations, which were all paying coin in 1848, have since been obliged to suspend such payments. During this time, the metals exported from the suspending countries, together with current supplies, have barely maintained the level of prices in the few countries still paying specie. Supplies from suspending countries have nearly come to an end, as there are but three or four commercial countries left which now maintain specie payments. The question, therefore, seems to be a serious one, whether both the metals together are not inadequate for the advancing wants of the world.

During this time, only one important country, Great Britain, has been able to maintain payments in gold. Such is still the scarcity of that metal, notwithstanding a production since 1848 amounting to $3,215,000,000, that the pending effort of one other important country, Germany, to establish a gold standard, has precipitated a monetary convulsion throughout the world without example in its extent and intensity, and the final results of which it is impossible to foresee, and has inflicted upon Germany itself an industrial prostration which menaces the most serious social and political disturbances.

The attempt of a third country, of the importance of the United States, to establish a gold standard, while the production of that metal is still stationary or declining, will be a ruinous failure, or, if it succeeds, can only do so temporarily and through the destruction of all the productive interests of the country. A detailed statement cannot be made which will show that there is now more than $1,600,000,000 in gold coin and bars in the western world. That the current supply is not more than the current consumption, is shown by the fact that no increase of the aggregate stock since 1865 is anywhere visible. On the 3d of August, 1872, the London Economist published tables proving that the annual excess of gold imports into Great Britain over exports, from 1858 to 1871, averaged five millions sterling, showing that amount to be needed annually to keep up the British stock. On the 16th of January, 1875, the Economist reiterated its convictions:

> The annual supply necessary for England alone is £5,000,000.

Five millions sterling for that single country is one-fourth part of the present total gold production of the world.

At the lowest calculation $300,000,000 in gold would be required to enable the Government and banks of this country to resume and maintain specie payments in gold. This amount is about 20 per cent. of the entire stock of the western world. No such draught can be successfully made upon that stock without causing a ruinous fall in gold prices everywhere. These considerations should call a halt in the attempt to chain this country to a metal whose supply, without any demand from this country, has been insufficient to prevent the general decline in gold-prices which has been a continuing one for several years and is still unchecked.

The resumption of specie payments in gold is said to be an easy task, because the premium on gold is now reduced to a small percentage. It would be easy if resumption involved only a reduction of commodities from their present valuation in greenbacks to their present valuation in gold. But what is really involved is a reduction from present prices in greenbacks to the prices in gold, which would prevail after gold was enormously enhanced in value by the new demand and competition for it with other countries, which gold resumption in this country would inevitably cause. The premium on gold in greenbacks is small, but the premium on gold in Bank of England notes was still smaller in 1821, when the British resumption of specie payments in gold resulted in a most ruinous reduction of the prices of property and of the wages of labor. The value of gold is not at all the same thing before and after a sudden and new demand for it to the extent of hundreds of millions of dollars.

With the history yet fresh of the British gold resumption, which brought ruin upon a generation, there can be no excuse for repeating the fatal error of David Ricardo, the leader in that disastrous work, that resumption means only an appreciation of paper equal to the difference between paper and gold before the resumption.

In the debates in the British House of Commons on gold resumption, May 24, 1819, Mr. Ricardo said:

> The question is not deserving half an hour's consideration of the House. The difficulty is only that of raising the currency *three per cent.* in value. And who can doubt that, even in those states in which the currency is entirely metallic, it often suffered a variation equal to this without inconvenience to the public?

William Ward, (Remarks on the Commercial Legislation of 1846,) quoted in Doubleday's Life of Sir Robert Peel, (vol. 1, page 245,) says:

> Mr. Ricardo lived to change his opinion, and shortly before he died (1823) expressed that he had done so. The late Sir W. Heygate was with him, and he said, "Ay! Heygate, you and the few others who opposed us on the cash payments have proved right. I said the difference at most would be only *five per cent.* and you said that, at the least, it would be *twenty-five per cent.*" This is stated on the authority of the late Alderman Heygate. It is a pity that Mr. Ricardo did not, as some atonement to his country for the tremenduous mischief he then, past doubt, occasioned, publish this recantation under his own hand.

If, however, what is intended is not an actual resumption of specie payments in gold, and the actual and constant convertibility of greenbacks and bank-notes into gold, but only the appreciation of greenbacks to a nominal parity with gold, and if greenbacks are to continue to be the ordinary currency of the people and gold is still to be used only for the payment of import-duties, an immense injury will have been inflicted upon the country without any commensurate benefit. There would still be fluctuations, depending upon the course of foreign trade, in the relative value of gold and greenbacks, and calculations of the greenback price of gold would be no easier at 100½ than at 105. Any resumption not based upon a large and adequate supply of gold would be a delusion and a snare, leaving the country exposed to the changes and chances of commercial and political events abroad. The business of the country would be always disturbed by the fear or fact of suspension. A merely nominal resumption would be a baseless air-built castle, liable to be toppled over by every breeze.

If a parity of the national currency with specie is to be treated as resumption, that currency has already reached not merely a parity with, but a premium of three per cent. above a specie [silver] dollar, which was a full legal tender when specie payments were suspended. To that resumption, the only one that law or equity could demand, there is no present impediment except the interdiction of the coinage of that dollar.

The United States a silver-producing country.

The United States is the largest silver-producing country in the world, furnishing, in fact, rather more than one-half of the total supply. Although there is no good reason to expect any great and sudden enlargement of the silver yield of this country, our argentiferous territory is wide and is being vigorously explored, and the facilities of all kinds for that species of mining are being constantly enlarged. From the nature of things, silver-production rises and falls more slowly than that of gold, but we may expect the occasional discovery of rich veins, and a steady increase of the capital invested in silver mining, unless the value of silver be depreciated by demonetization. And the first impression, at any rate, must be that it is a singular policy for the greatest silver-producing country in the world to co-operate in movements to depreciate the value of the product.

In a report made to the United States Senate, June, 1868, recommending "*a single standard exclusively of gold*," and assigning four reasons therefor, Mr. Sherman, of Ohio, gave the first place to the following:

> The United States is the great gold-producing country of the world, now producing more than all other nations combined, and with a capacity for future production almost without limit.

Mr. Sherman was misinformed as to the facts. The United States have not produced as much gold as all other nations combined in any year since 1850. Its production in 1868 was $48,000,000, and that of all other nations $72,000,000. But if the supposed fact in 1868, that the United States produced more gold than all other nations, was a good reason for making gold the sole money standard, the real fact that the United States now produce more silver than all other nations seems to be at least as good a reason for retaining that metal in its old place in the double standard.

It is said that, although we produce silver largely, we produce gold quite as largely, and that it may be some time before there is such an excess of silver-production as to cause a material depreciation in its value.

The suggestion made is, in substance, that if we lose by the depreciation of silver resulting from its demonetization, we shall gain as much or more, or, at any rate, some considerable offsetting advantage by the appreciation of gold. That seems to be true if we do not look beyond the direct gain of the rise in the value of the gold that we produce. But as, in the case supposed, gold is to be the measure of the value of everything else, a rise in the value of gold means a fall in the prices of all commodities and all forms of property. And as gold measures commodities and property so immeasurably exceeding itself in value, no rise in its value can be a compensation for the losses it must cause. If no better indemnification is proposed for the ruin of our silver-mines than such an appreciation of gold as will reduce the prices of property of every description to a ruinous level, aggravate the burden of debts, and arrest the industrial progress of the human race, the indemnification is an immeasurably greater calamity than the loss for which it is proposed as a compensation.

The trade relations of the United States with Europe and with other parts of the world compared.

It is often said that we should conform our money standard to that of the commercial nations—that is to say, of England and Western Europe—rather than to that of Asia, Africa, and Central and South America; and that we should have the gold standard because England and Germany have it, and because the same standard will, it is predicted, be adopted by the other nations of Western Europe.

This suggestion involves two ideas, both erroneous: *first*, that trade with commercial nations is specially advantageous and more worthy of cultivation than trade with non-commercial nations; and, *second*, that trade between commercial nations is facilitated by uniformity in their money standards.

The traditional ideas of mankind have certainly always been that it is the greater or less degree of commerce with the East which determines the commercial position of nations. It is a familiar and general belief that it was the control of the trade of the Orient which aggrandized Tyre and Alexandria in ancient times, the Italian cities of the Middle Ages, and, after a change of the route to the East by the doubling of the Cape of Good Hope, first Portugal, then Holland, and finally, and to the present days, England.

It was in pursuit of the prize of the oriental trade, to be reached by a new route to the Indies, that Columbus discovered America, which he did not seek. It was the control of the oldest route to the Indies that fired the ambition of Napoleon and suggested his Egyptian campaign. It is because England knows that its commercial supremacy depends upon Asiatic trade and upon keeping open the road to India, that it made the sudden purchase, a few months ago, of an interest in the Suez Canal, at a cost of $20,000,000. The danger that the threatened war between Russia and Turkey will not be confined to those two countries, is the certainty that England will defend its connections with Asia against all comers, and especially against any territorial advance of Russia which may menace them. When that vital point is assailed, England will bristle with war, to be waged with all its forces by land and by sea, with or without allies, tooth and nail, to the last man and to the last pound sterling.

Being in the same general climate, on the same plane of civilization, and with a near equality in the perfection of the industrial arts, the western nations of Europe seem to be naturally our commercial rivals rather than our customers. And this is so, with the large exception which arises from our ability to supply certain raw products and agricultural staples.

Describing our situation summarily, it may be said that our commercial intercourse with Western Europe consists of two parts:

First, the export of articles indispensable to Europe, such as cotton, the cereals, tobacco, and the products of animals, a trade which needs no stimulation or favor of any kind.

Second, the import from Europe of manufactures. This is a trade which all parties and the representatives of all shades of economical opinion in this country wish to see steadily diminished and eventually terminated. The reasons which conduce to this uniformity of desire are very diverse, as also are the modes proposed to accomplish the object sought. Some propose protective tariffs and high duties as the best means. Others maintain that the better if not the only way to keep out European manufactures is by the production in this country of superior articles at lower prices, and that this is only possible with free trade or simply a revenue tariff and cheap raw material. But, by whatever way it may be reached, a diminution, tending always to an extinction of imports from Europe, is universally desired in this country.

It is in trade with other parts of the world, in less advanced stages of civilization, or with essentially different systems of civilization, or with essentially different raw products resulting from marked diversity of climates, that we find the natural outlets for our manufactures, and in many cases the opportunity for a mutually advantageous exchange of native productions. It is not perceived that that trade can become too large. All interests and opinions favor its expansion, and, unlike the trade with Western Europe, its existence and extent depend upon the wisdom and vigor of our efforts to secure and increase it. Our trade with England would be but little affected if we should be entirely passive in relation to it. With China, on the other hand, we have no trade which we do not actively seek. Commercial nations will seek after our trade. We must ourselves seek after trade with the non-commercial nations.

It is by no means clear that trade between nations is either increased or facilitated by a concurrence in their standards of money. But even if it were so, the double standard would meet all requirements better than the single standard. It would tend to keep constantly available a sufficient stock of both metals for the trade of either gold or silver standard countries.

However it may be in respect to trade with non-commercial countries, it has never been shown that diversities of money, however arising, whether from single standards of a different metal, or from systems of irredeemable paper currency, are any hinderance to trade between commercial countries. Whatever the moneys of such countries may be, they are always interconvertible at known and not widely-variant rates. There is no property on sale in London for which the holder would refuse payment in silver or in greenbacks at the current rates of exchange; and there is no property on sale in New York for which the holder would refuse payment in Bank of England notes at the current rates of exchange. Greenbacks are not a legal tender in London. Silver is not a tender there. Neither are American gold eagles, and both greenbacks and silver are as readily convertible into sterling money as gold eagles are. The irredeemable paper currency existing in this country since 1862 has not obstructed its European trade in any degree whatever. The trade of England with commercial countries was not obstructed when it had an inconvertible paper currency from 1797 to 1821. The paper moneys of Russia, Austria, Italy, France, and Brazil, although differing greatly in their value relatively to gold and silver, are no hinderances to their trade with each other, with the United States, or with European countries having metallic standards. Various nations in Europe, in close proximity to each other, or having large intercourse with each other, have had different single metallic standards, without experiencing any inconvenience from that circumstance. The single silver standard existed in Holland from 1847 to 1875, and in Germany from 1857 to 1871, but the large trade of both with England, having a single gold standard, was carried on during those periods with undiminished facility.

The long and still continuing difference of currency between England and its greatest dependency, India, is a striking illustration of the fact that trade between distinct peoples is not obstructed by the difference in their money standards. Both are parts of one empire, and the coinages of both are impressed with the head of the same ruler, but the British sovereign is not a good tender for a debt in Calcutta, nor is the Indian rupee a good tender for a debt in London. Cases are said to have occurred of such extreme financial pressure in both those cities that loans of money, that is to say, silver, have been refused at Calcutta on a pledge of sovereigns, and that loans of money, that is to say, gold, have been refused in London on a pledge of rupees. No difficulty has ever arisen in the immense trade between Great Britain and India from this difference of currencies, although this is doubtless due in part to the exceptional circumstances which have given to England a large and constant supply of silver, notwithstanding that its standard money is gold.

A fact, less striking in some aspects, but more so in others, is the difference in the actual currencies of the Atlantic and Pacific States of this Union. The difference is not made by law, but is a matter of choice on the part of the people of the Pacific slope. They judge that it has advantages for them, and both they and the people on the Atlantic perceive that it is not in the least degree obstructive to their mutual intercourse. There is no more difficulty in translating the greenback prices of New York into the gold prices of San Francisco, than there is in translating pounds avoirdupois into French kilograms.

A distinguished writer, J. E. Cairnes, professor in the University College of London, in a recent work (1874) on Political Economy, says:

"It appears to me that the influence attributed by many able writers in the United States to the depreciation of the paper currency, as regards its effects on the foreign trade of the country, is, in a great degree, purely imaginary. An advance in the scale of prices, *measured in gold*, in a country, if not shared by other countries, will at once affect its foreign trade, giving an impulse to importations, and checking the exportation of all commodities other than gold. A similar effect is very generally attributed by American writers to the action on prices of the greenback inconvertible currency. But it may easily be shown that this is a complete illusion. Foreigners do not send their products to the United States to take back greenbacks in exchange. The return which they look for is either gold or the commodities of the country; and if these have risen in price in proportion as the paper money has been depreciated, how should the advance in paper prices constitute an inducement for them to send their goods thither? The nominal gain in greenbacks on the importation is exactly balanced by the nominal loss when those greenbacks come to be converted into gold or commodities. The gain may, in particular cases, exceed the loss, but, if it does, the loss will also, in other cases, exceed the gain. On the whole, and on an average, they cannot but be the equivalents of each other."

The trade between commercial countries is an exchange of commodities, made directly or indirectly. The settlements in money are trifling, temporary, alternating, and are always made in the money of the country which has the balance of trade for the time being in its favor. The office of money in the intercourse of commercial countries is merely that of measure, description, and reckoning. Diversities of moneys can occasion only trifling inconveniences, similar to those arising from diversities of weights and measures, and of length and capacity. The inconveniences arising from a diversity of languages are very much greater. All these diversities exist, and are likely to exist, and none of them produce any direct and material effect upon commerce. The trade of this country with Europe is not affected by the money in use here, any more than the foreign trade in cotton cloths would be affected by an elongation of the yard from three to six feet, which would simply reduce the number of yards and increase the price per yard, in an invoice of that commodity. It is not in its relation to European trade that the question of the money of the United States is of any importance. It is in its internal and domestic effects, in its effects upon the equity of contracts, and upon the real burden of an incomputable mass of debts, and upon productive interests and the wages of labor, that the money question becomes overshadowing and transcendent.

Trade with the non-commercial nations whose money-metal is silver, and especially with China and India, whose exports always exceed their imports, presents somewhat different conditions. It has been claimed by very high authorities, as an advantage of the double standard, that it tends to keep on hand an available stock of silver, and thereby facilitates trade with such nations.

The French Baron Rothschild insisted strenuously upon this point in his evidence before a French monetary commission in 1869. He said that France frequently needed silver, as to pay Russia for wheat when the home crop failed, and always had it, because the double standard kept it in the monetary stock, but would not have it if the gold standard should be adopted. His language was:

> If the coinage of silver was suppressed in France, less would come here, as it would no longer be attracted by the facility which commerce now has of converting it into money. It is this power of converting the bullion into money which attracts silver to France, and causes it to remain, even when the price is for the moment too high to admit of its being coined.
>
> The circulation of silver serves as a reserve, when, by reason of the failure of the harvests, it is necessary to buy corn in countries in which, as in Russia, the current money is silver. If that metal should be reduced to merchandise in France, as it is in England, commerce would have less facility in procuring it, and the reserve of it in the country would disappear.

And the event has shown that now, only a few months having elapsed since the coinage of silver was suspended in France, not a single ounce of bar silver can be purchased in Paris.

It is only from peculiar circumstances that England has suffered so little from this difficulty. It is said of London that it is such a great commercial center that everything may be found there at any and all times. The demand in London for silver for transmission to the East is large and constant, and, as a consequence, nearly all the silver supplies of the world have been, until quite recently, sent there for sale. Silver is, generally in sufficient stock there to meet all demands, although at exceptional periods, as when large amounts were required to balance the large English imports of cotton from India during our civil war, considerable difficulty was experienced in obtaining it. But, with all these special facilities of England, Sir Robert Peel, in framing the law of 1844, which still governs the Bank of England, provided that one-fifth of its bullion might be kept in silver, his language being that this "*was a proper remedy for the inconvenience of our standard differing from that of other nations.*"

The first impression might be that the United States, producing silver so largely, would always have it on hand in sufficient stock, even if the gold standard should be adopted. But miners, of course, sell it as fast as they produce it, and as nobody can keep it as money it would pass at once to foreign purchasers. A remarkable proof of this is the statement in the recent report of the Director of the Mint, that there is not now in this country, exclusive of plate, manufactured articles, and subsidiary coinage, more than the insignificant sum of three millions of dollars of silver.

Our trade with what are called the non-commercial countries, and especially with Asia, all of them using silver, and most of them using it as a sole currency, considered with reference to either its actual or possible magnitude, presents aspects of prime interest. It is in that trade mainly that we must look for outlets for our manufactures. It is on the field of that trade that we must contend for the palm of commercial supremacy with our European rivals, and the contest is too close to admit of the heedless throwing away of any advantage. We must favor intercourse with Mexico and South America, by being in a condition to give them the best prices for all the results of their mining industry, and with Asia, by the abundant and constant possession of the metal which will command its products.

All the known great deposits of silver in the world are found on this continent. It cannot be obtained without an outlay of capital and labor, but on this continent, like the fruits of agriculture, it can always be had when capital and labor are applied to its production. This is not true of gold, either on this continent or elsewhere. Everywhere along the vast range of the Cordilleras, from Cape Horn to Alaska, are to be found deposits of silver-ores. Nature has thus placed in American hands an everlasting supply of the metal which Asia has always required. To demonetize silver ourselves, and thereby to use the weight of our influence in the direction of demonetizing it everywhere, is to throw away gratuitously one of the special and distinguishing commercial resources of the New World.

The comparative effects of the double and single standards upon the stability of the money-market in the United States.

It is important to consider whether the steadiness of the money-market in this country will be best secured by the exclusive use of the money of England, or by using a money of which one of the constituent elements is the currency of the non-commercial nations.

England has been conspicuous, certainly for two generations, for the frequency and violence of its commercial, banking, and monetary panics. The rate of interest of the Bank of England was changed two hundred and twenty-three times in the twenty-seven years beginning with 1847, and the range of fluctuation was from 2½ to 10 per cent. It is now 2 per cent. In the one hundred and twenty-two years preceding 1816, when the gold standard was adopted, there were only sixteen changes, and the rate never fell below 4 or rose above 6 per cent.

The frequently recurring crises in the London money-market have been ascribed by high authorities to the existence of the narrow basis of gold.

In testimony given before a parliamentary committee in 1828, Alexander Baring said:

> A sudden change from peace to war, a bad harvest, or a panic year arising from overtrading and other causes, immediately impose upon the Bank of England, which is the heart of all our circulation, for the purpose of protecting itself, to stop the egress of specie; sometimes even to bring large quantities into the country. These indispensable remedies are always applied with more or less of restriction of the currency and consequent distress. * * * No care or prudence can enable the great bank to avoid occasional resort to those measures of defense. * * * It is evident that the bank, wishing to re-enforce the supply of specie, can do so with infinitely increased facility with the power of drawing gold and silver, than if it were confined to one of the metals. * * * The greater the facility of the bank to right itself, the less frequent will be those sudden jerks and changes so fatal to credit and commerce.

Similar views were expressed in a pamphlet issued by Lord Ashburton (of the house of Baring) after the crisis of 1846.

A more general reason for the instability of the London money-market is, that as the English surpass all other people in opulence and commerce, so do they surpass all other people in the magnitude of their commercial and banking credits. The credit system, which is a part of modern civilization, and which has grown with its growth and strengthened with its strength and is one of its glories and necessities, like most other beneficent agencies, brings with it some disadvantages. One of the greatest of these is its tendency to produce commercial and financial crises, which the wit of man has as yet found no sufficient means to prevent.

In contrast with the violent monetary fluctuations of England, and the less violent fluctuations of the other highly-civilized nations of Western Europe, are the stationary conditions and the repose of the non-commercial nations, and especially of Eastern Asia. There may be nothing praiseworthy in this quietude, but it is none the less an existing condition, and it is one of the consequences of this condition that Asia never disturbs the world with bank panics, or with any "*jerks and changes*" in its demand for silver, which is its money. It takes more or less of it, only as the moderate fluctuations of actual commerce enable it to command more or less.

Of all the reasons for adopting the gold standard, this reason to persuade, that it is the standard of England and may become that of all Western Europe, should dissuade us most. We have causes enough of fluctuations in our own internal condition, and in the sanguine and enterprising character of our people, without adding to them, if we can possibly avoid it, that of an identity of currency with a quarter of the globe most subject from the nature of things to currency crises and disorders.

It was this view which governed the statesmen of Holland, when they adopted the single standard of silver in 1847. Their reasons, as given in a letter of S. Vissering, professor of political economy in the University of Leyden, published in the Journal des Economistes, (January, 1876,) were—

> Because England, which then almost alone had the standard of gold, was subject to frequent monetary crises, and that by adopting the same rule we should run the risk of being involved in those crises.
>
> Because the mass of silver in circulation, and the conditions of the production of that metal, gave it a fixity of value to which gold could not pretend.

The views thus held in Holland were expressed in 1871 in the following more energetic language of an English economist, (London Statistical Society, vol. 34, page 352:)

> England is the peculiar seat of monetary crises, just as Egypt is of the plague and India of the cholera. These monetary plagues are the bane and opprobrium of our country.

In addition to the irregularities of its production, gold lacks sufficiency of mass to give it steadiness. It is necessarily so subject to "*jerks and changes*," that to use it as an exclusive standard must reduce all business to gambling. No merchant can buy goods with gold to be sold for gold a year afterward, or even a few months afterward, without being subjected to a heavy risk. If he covers the risk by extra profits in the nature of insurance, he must impose a heavy tax upon those who deal with him. Whoever enters into a contract to pay gold in one, two, or three years cannot, by any possibility, foresee what its value may be when the contract matures. Gold, when unsteadied by silver, is as unstable as water. The long experience of England has shown it to be one of the most fluctuating, treacherous, and dangerous currencies ever devised. The present head of the British ministry said, three years ago, that England did not become rich by adopting gold, but adopted gold because it was already rich. He might have added, that it was only the great wealth acquired by England under a sounder and better system which has enabled it to endure the mischiefs of a currency which has made it "*the peculiar seat of monetary crises, just as Egypt is of the plague and India of the cholera*." If England was not the creditor of all the world on gold contracts, and if that consideration did not really dominate over everything else in determining its policy, it would abandon a system which is its "*bane and opprobrium*."

It is one of the admitted advantages of our present system of irredeemable paper, that it shelters us from the recurring demands for gold by the Bank of England. The London revulsion of 1866, when one banking-house (Overend & Gurney) went down with liabilities of ninety millions of dollars, was scarcely felt here. With a currency of gold, or of paper convertible into gold, we should feel instantly every change in Europe, and especially in England. We should not altogether escape that influence with the double standard of gold and silver, but at any rate, with such a standard, one part of our currency would be secure from European perturbations.

The dollar and the pound.

It was suggested in various forms of language by some of the witnesses examined by the commission that the British gold sovereign, or pound sterling, is for the world the generally accepted monetary unit of value, and is the best known and most widely used form of money, and that this is a reason for the adoption of the single gold standard by the United States. And in this connection it is said that even our purchases in the East, when made with money, are not made by sending silver, but by sending bills of exchange, drawn on, accepted in, and payable in London, and in the money of London. And the inference is drawn that such bills have a world-wide acceptability, in consequence of the particular currency in which they are payable. But, manifestly, the availability in distant regions of such acceptances depends wholly upon the credit of the acceptors, and in no degree upon the money in which the bills accepted are expressed.

Such acceptances were equally available when pounds sterling signified Bank of England notes, as they did from 1797 to 1821, as at present, when they signify gold sovereigns. The availability of such acceptances depends upon the fact that London became early the central point of the wealth, banking, and commerce of the world, and has banks, bankers, and commercial houses, the solidity of whose credit is everywhere known. The pre-eminence of London in these particulars, fairly won and fairly maintained by solid traits of national character, must be admitted to still exist, but it is weakened sensibly by the advancing rivalry of New York, and may soon be by that of San Francisco. "Who shall say," to quote the words of Governor Morgan, (report to United States Senate, June 9, 1868,) "that the course of trade may not make an American city, New York or San Francisco, the center of exchange, and confer upon us the advantages so long enjoyed by European capital?"

In the United States Senate, March 9, 1870, the pending proposition being to authorize the refunding of the national debt in bonds payable in London, Paris, Amsterdam, and Berlin, in pounds, francs, and thalers, the late Mr. Sumner opposed it, exclaiming:

> I cannot forget my own country, nor can I forget that great primacy which I hope to see her assume in the money-markets of the world. New York is our natural money-center. Why should we revolve about European money-centers? Let us keep our own center here at home.

There may be merchants, wedded to an accustomed routine, who believe that it is only through the circuitous and clumsy expedient of a bill of exchange on London that America can pay silver in China. But this will not be credited by the active men of the present generation, who can better realize that we have now a great and opulent city on the Pacific, within thirty days' steaming of Japan and China, which is the gateway of our silver mines, and which would hold their products always in large stock if silver were remonetized. London, at any rate, realizes it, and it is stated in a recent number of the Economist, of that city, that "London merchants now pay for their tea and spices by telegraphing to San Francisco orders for the shipment of American silver." And if it is not true to-day, the time is not distant when it will be true, that to whatever extent commercial and bankers' acceptances are used by us in the East in lieu of coin, they can be obtained in San Francisco more advantageously than in London. Some of the greatest banking-houses in Europe, including the Messrs. Rothschild, are already represented by agencies in San Francisco.

It is no disparagement to the pound sterling, which represents the opulence and good faith of English merchants and the unvarying integrity of the English coinage, to say that the silver dollar has been longer known, is more widely used, and is more familiar to mankind than any other coin of either metal. It was in common use in 1785, when the American Congress adopted it as the unit of account. The credit of our decimal money is due to Mr. Morris, but it was Mr. Jefferson who proposed the dollar as the unit of account, and, in his paper addressed to Congress, he assigns as the reason, that the Spanish silver dollar was "*familiar to the minds of the people, and already as much referred to as a measure of value as the respective provincial pounds*," although our British connection had been so recently severed. We had come by the dollar naturally, from our proximity to and growing trade with Spanish America. It was through Spain, as the sovereign of the silver-mining regions of this continent, that the world received its metallic supplies for centuries, and that the silver dollar became everywhere known. But it is said, and appears to be true, that Spain received the dollar from Austria during their union under Charles V, and that it was first coined from the silver of the Bohemian mines as the "thaler," which name it yet bears in Germanic countries.

If there are Americans who are gratified to concede that the pound sterling is and must remain the world's unit of monetary value, there are Englishmen who reluctantly yield the palm to the silver dollar. Jevons, discussing the question of the probable international unit of the future, says (Money and Exchange, page 170) of the Spanish and Mexican silver dollars, that "these coins have for a hundred years past been received by tale almost without question in most parts of the world." On page 172, he says that "the Americans might have much to say in favor of the dollar. It corresponds to the coins which have for two or three centuries been most widely circulated and treated as units of account, so that there is much weight of experience in its favor." And again, on page 179, he says that "the fact that the dollar is already the monetary unit of many parts of the world gives it large odds."

For us, this question was settled by our revolutionary ancestors in 1785, and by the mint act of 1792, which bears the approving signature of General Washington. And it is a noteworthy fact that General Washington is connected with the silver dollar, not only by his approval of the act of 1792, but by his indorsement of the memoir of Mr. Jefferson which led to the adoption of the silver dollar unit in 1785. (Washington's letter to Grayson, in Sparks' Life of Washington, vol. 9, page 125.) The silver dollar has thus the sanction of the solid and practical sense of General Washington, added to that of the learning, genius, and philosophy of Mr. Jefferson. It is as much a tradition of the United States as their national military air, or their national flag, and it is a policy as well as a tradition.

Money in shrinking volume the primal cause of the present universal commercial and industrial depression.

The real cause of the present universal derangement of commerce and industry must be ascertained before the proper remedy can be devised. The causes assigned are various and contradictory. Many of them never had any existence in fact. Others are inadequate or absurd in themselves, or by reason of being confined to narrow localities or special interests, cannot have produced a mischief which reaches all places and all productive interests.

Overproduction is one of these alleged causes, although food, clothing, houses, and everything useful to mankind, are and probably always will be in deficiency, as compared with the needs for them. The constant effort of the human race is and ought to be to multiply production. The aggregate effective demand for products, that is to say, the aggregate demand accompanied by an ability to purchase, always increases with production. Supply and demand mean substantially the same thing, and are nothing but two faces of the same fact. Every new supply of any product is the effective basis of a new demand for some other product. The capacity to buy is measured exactly by the extent of production, and there is practically no other limit to consumption than the limit of the means of payment. Overproduction of particular things may occur, but that is soon corrected by the loss of profits in producing them. Overproduction in the general and in the aggregate is impossible. The contrary opinion will be held only by those who regret the discovery of the steam-engine, the spinning-jenny, and the sewing and thrashing-machines, and who believe that while mankind have the skill to devise methods of increased production they have no capacity to provide for the distribution of the products of industry. Production is the sole and only source of wealth, and in fact is but another name for wealth. Overproduction must therefore mean superabundant wealth and the idea that either superabundant wealth or superabundant facilities for producing it can be the inciting cause of rapidly spreading poverty is repugnant to the common sense of mankind. All reputable authorities concur in treating the idea of a general overproduction as the idlest of fancies, and wholly unworthy of serious notice.

Too many railroads are said to have been built, when it is clear that there is an urgent need for more. Undoubtedly a too rapid construction may create an abnormal demand for and rise in the price of the special materials required in railroad building and may possibly cause an abnormal advance in the interest on money by absorbing too much floating capital in a fixed form, but such evils are self-corrective. Railroad-building will always halt under such circumstances until the cost of materials and of capital ceases to be excessive. The tendency of industry and enterprise to take profitable directions, and to withdraw from those which are found to be unprofitable, needs no other regulation than to be let alone.

Money sunk in railroads prematurely built and at present unproductive is another cause assigned for the existing condition of things. But the loss resulting from labor misdirected is no greater than the loss resulting from the non-employment of labor. One single year of the loss now sustained through the stagnation of industry, caused by falling prices, is a calamity of greater proportions than the total loss from all the badly-planned or unfortunate railroad enterprises of a decade. If it were really true that the labor lost in unproductive works is the cause, or one of the principal causes, of the present distress, the future must be dark indeed for this country, which has had an army of unemployed laborers since 1873, that is still being recruited as industries break down, one after another, under a shrinking volume of money and falling prices. If a few years of the misdirected labor of one hundred, or even five hundred thousand men, has brought on conditions under which three millions are forced to be idle, the evils to come hereafter from the present idleness of that vast number must be incalculable and self-perpetuating. They must prove an endless chain freighted with a constantly accumulating volume of disaster, a Pandora's box with hope left out.

That species of speculation in property and securities which is described as reckless and unsound is said to be one of the causes of the present distress. But even in gambling there can be no more lost than there is won, and the material damage to the community cannot exceed the worth of the time of those engaged in it. The rating of property at higher or lower prices could not result in a destruction of the property, or even in the impairment of its productiveness. It would be deplorable if it were true, but happily it is wholly untrue, that the prosperity of the prudent and industrious is at the mercy of gamblers, of whatever species or degree.

A condition which is universal cannot be explained by local facts, such as the American civil war, the Prusso-French war, or the sudden and great rise in the price of English coal and iron in 1872–'73. The last fact, and the commercial and financial speculations in England connected with it, are much insisted on by English writers as the causes of the present state of things. They forget that the panic and depression in England in 1866–'67–'68 revealed the existence there of an amount of reckless financiering, of frauds in railroads, and of rottenness among bankers and merchants far greater than existed either in England or elsewhere in 1872–'73. The measure of comparison is accurately enough indicated by the Collie failure of 1875 for $9,000,000, and the Overend & Gurney failure of 1866 for $90,000,000. That the British financial collapse of 1866 was not felt in the United States is a matter of familiar knowledge in this country. But it was not even felt in Continental Europe. There is British authority (Journal of Statistical Society of London, vol. 34, page 243) for saying that "*not even a tremor of the crisis of* 1866, *so terrible for England, passed across the British Channel.*" The mischief was confined to England, because there was not then as now everywhere at work the dry-rot of a contracting money.

Devastations of war in the years immediately preceding 1873 are assigned as one of the conspicuous causes of the depression, and oftentimes by the same philosophers who, by a contrary process of reasoning, assign overproduction as the principal cause. These devastations are described as great enough to have arrested the production and prevented the accumulation and distribution of wealth. In truth, from the French campaign in Italy, terminating (1859) at Solferino, to 1873, there was no war of serious magnitude except the American civil war, and even this war scarcely retarded the increase of national wealth in the United States. The peace of Europe during that entire period was substantially unbroken, and its unprecedented advance in prosperity, following the California and Australian discoveries, was checkered by no pause. The Prusso-Austrian war was an affair of days. The Franco-German war was an affair of weeks, and was only protracted to months by a siege. The war between Austria and Italy consisted on the land of one single day's fighting, and on the sea of one naval skirmish. These several events had political consequences that were momentous, but were so confined in space and time that their effects on commerce and industry were obscure and unimportant, indeed much less important in these particulars than were the effects of the revolutionary struggles in Europe in 1848–'49. The assignment of the devastations of war as a cause of the present distress is as absurd in its logic as it is erroneous in its assumptions of fact. The financial catastrophe of 1873 came, not because the progress of mankind had been previously checked either by war, or other causes, but on account of the precisely contrary fact, that this progress had continued unchecked after the supply of metallic money had become stationary or declining.

It is sometimes said that what is being witnessed is a coming down to solid bottom in prices. But the question of prices is a question of the standard in which they are measured. Wages at $2 per day, with a currency of gold and silver, are as much on solid bottom as they would be at a lower range with a currency of gold alone, and what are called bottom or bed-rock prices when the standard is gold would in their turn be described as inflated if a new policy should decree that money should consist only of diamonds. Prices are nothing but the expression of the relation between money and other things, and in the end can never express it otherwise than correctly, and when so expressed prices are on the bottom wherever that may be, the range of prices, whether higher or lower, depending on the relation between the volume of money and other things.

It is maintained by many that existing evils are the results of a loss and lack of confidence, and that the sufficient remedy would be found in its restoration. On all occasions they portray in glowing phrase the abounding prosperity which would follow if moneyed and other capitalists would freely exhibit confidence by inaugurating industrial and commercial enterprises. But it is to be observed that they content themselves with recommending confidence to others, while they are careful not to make a practical exhibition of any on their own part. They seem, in short, to be unconsciously influenced by the view that while they might profit by the confidence of others, confidence on their own part might involve them in losses. The real mischief is not the lack of confidence, but the lack of any legitimate grounds for confidence, and there neither will be, nor ought to be, any revival or extension of confidence so long as the volume of money continues to shrink and prices continue to fall.

Under existing conditions, if by any possibility confidence could be inspired, the consequences would be baneful rather than beneficial.

Similar conditions to those which preceded the panic of 1873 exist in the main to-day. The volume of money is shrinking absolutely and relatively to other things, although perhaps not as rapidly as between 1865 and 1873, and the prices of property are gradually shriveling. The principal difference is that since 1873 the credits extended by moneyed institutions have been largely curtailed or cut off altogether, and consequently the material of which panics are made is not in as great abundance as then. The collapses which are constantly occurring do not make as much noise nor attract as much attention as the explosion of 1873, because they do not occur simultaneously nor conspicuously with public institutions, such as banks, as in 1873, but nevertheless they are constantly taking place in all parts of the country in increasing numbers. All that is necessary to change this monotonous rattle of isolated collapses into a general crash is to restore confidence and credit. As the collapse of 1873 is generally attributed to an overextension of confidence and credit, a restoration of confidence now, when the conditions are the same, must pave the way to a new collapse, and would be placing a dynamite for future explosions under the foundations of business.

It is very necessary to understand in what particulars confidence has been lost before deciding that its restoration is either possible or, under existing conditions, even desirable. It has not been lost in the intrinsic value of real estate or of any useful thing. It has not been lost in the fruitfulness of the soil, or in the ingenuity, industry, or integrity of the people, the stability of the Government, or in the productive powers of labor and machinery. Confidence has not been lost in anything except the possibility of maintaining prices while the volume of money is being shrunk by existing legislation. Confidence has been lost that capital invested in productive enterprises can be returned with a profit, or even intact, to the investors. Its restoration while present conditions remain is impossible, and would work mischief if it were possible.

It is stoutly affirmed by many that the present stagnation is the result of uncertainty as to the future value of the paper money of the country. If there were any such uncertainty, and if there were, consequently, possibilities of a rise as well as of a fall in prices, the adventurous temper of the business men and the people generally would cause active investments and purchases, as was illustrated during and immediately after the civil war, when such an uncertainty really existed. The true cause of the stagnation is to be found in the opposite fact. Instead of it being an uncertainty as to the future value of paper money, it is the absolute certainty that, under present legislation, paper money must still increase in value and that prices must continue to fall.

The statement that there was any general rise of prices during the two or three years prior to the crisis of 1873 is wide of the mark. The highest range of prices attained was in or about 1865. From that year on to 1873 there was a general tendency to a fall, but such was the momentum which extraordinary metallic supplies had previously given to them that they continued comparatively firm for seven or eight years after their metallic support had become insufficient, and after they were left to stand in part upon the treacherous foundations of credit. In 1873 those foundations suddenly gave way, and prices, property, banks, and business houses went down with a crash. In this country, as is familiarly known, it was only by mortgages that the nominal prices of real estate, the largest and principal description of property, were sustained during 1871–'72–'73. Even by this means it was only in rapidly-growing cities and towns that real estate prices were kept up, while during the same period, and for several years immediately prior thereto, the prices of agricultural lands were abnormally low. Without doubt, the prices of a few commodities were high in 1871–'72–'73, but only from exceptional causes. Iron was abnormally high in those years from a sudden expansion of railroad building, and this led to great speculations, notably in England, in iron and coal. But the high prices of these articles do not prove a high level of general prices in those years any more than the high prices of cotton proved a high level of general prices during and immediately after the American civil war. The tendency of prices was already downward in 1873 when their fall was hastened and intensified by the demonetizations of silver by Germany and the United States.

The true and only cause of the stagnation in industry and commerce now everywhere felt is the fact everywhere existing of falling prices, caused by a shrinkage in the volume of money. This is in part the misfortune of mankind, as the mines have failed for several years, under energetic working, to yield the precious metals in quantity sufficient to keep pace with the increasing needs of the world for money. But it is in part due to the folly of mankind in throwing away a benefaction of nature by discarding one of the precious metals. Existing evils date with that folly, which precipitated and now enormously aggravates them.

Many learned and excellent persons and associations of persons in all parts of the world, whose instruments of observation seem to have been adjusted for the examination of remote objects, and, consequently, unfitted for and a hinderance to the inspection and examination of anything near at hand, have furnished many far-fetched, incomprehensible, and impossible causes for existing evils, which agree in nothing except their remoteness. They have seen through a glass darkly or they would have discovered that the cause was all around and about them; that it is the same cause that has invariably preceded and accompanied similar evils. They would have seen that money in shrinking volume was engaged in its legitimate work of ruin. This is the great cause. All others are collateral, cumulative, or really the effects of that primal cause. Practical men see what the mischief is and they all see it alike, and, without formulating their ideas in set words and phrases, they all state it alike. Capitalists, large and small, give one, and only one, reason for refusing to invest in productive enterprises. Uniformly and universally the reason given is that prices are falling and may continue to fall, and that money is the best thing to get and hold while that state of things continues. All can see that prices have fallen and are falling, although they may disagree, or may not trouble themselves to form any opinion as to the cause of the fall. And all can see, and do see, that it is falling prices which cause the stagnation of business, with all its necessarily attendant circumstances of an increasing pressure of debts, of decreasing employment and wages of labor, and of diminishing consumption. Falling prices is only another expression for an increasing value of money, and those who desire still further to appreciate the value of money by contracting its volume, desire still further to reduce prices, and still further to widen and deepen the gulf between money-capital and labor. Money capital is the fund out of which wages are paid. Capital can only fructify through the employment of labor, and labor is helpless without capital. It is in vain to advise those who depend upon their daily wages for their support, and who possess no capital but their willing hands, to change their places of residence and engage in agricultural pursuits. Even had they the means to emigrate, which most of them have not, they would still have to be supplied with seed, implements, and animals, and with support from seed-time to harvest. It is still more plainly idle to advise them to engage in any species of handicraft or manufacture on their own account. In modern times human labor is available only in connection with machinery and appliances. A policy which tends to a constant fall of prices, and therefore compels capital from the justifiable instinct of self-preservation to withdraw from production, is a policy which reduces laborers to a worse condition than if money were wholly abandoned and the system of barter were re-established. The condition of the laborer is as bad when money-capital is not employed as if it did not exist. The effect of falling prices is the same upon the smallest capitalist as upon the largest. The hope of gain is for all of them the only inducement to take the risks and labor of enterprises, and they will all prefer to consume their accumulations rather than to invest with the certainty of losing them. They will, of course, consume them as slowly as possible, and to that end will reduce their expenditures within the smallest possible limits. Laborers thrown out of employment must in some way have a bare subsistence, but there can be no other sources for it than the scanty earnings of such as are employed, and the capital in existence, which cannot refuse food to the starving.

That shrinking money and falling prices are the cause of existing evils, was pointed out eight years ago by the London Economist, in its review (1869) of the previous financial year. It then said:

> It may be safely affirmed that the present annual supply of thirty millions sterling of gold is no more than sufficient to meet the requirements of the expanding commerce of the world, and prevent that pressure of transactions and commodities on the precious metals which means in practice *prices and wages constantly tending toward decline.* * * * The real danger is that the present supplies should fall off, and among the greatest and most salutary events that could now occur would be the discovery of rich gold deposits in three or four remote and neglected regions of the earth.

Instead of the discovery of new gold-fields, that which has actually happened since 1869 has been a declining production in old ones. The annual supply of $150,000,000, then considered barely sufficient to meet the demand, has dwindled to $101,000,000, while during the same period the demand and necessities for money have been constantly and largely increasing. This increasing demand, crowding upon a failing supply, was of itself a great misfortune; but, as if to change unavoidable evils into deliberate ruin, several commercial countries, including our own, demonetized silver. In its review of the financial year 1872, (published March 15, 1873,) the London Economist predicted the inevitable consequences in the following language:

> At the end of 1872, the (German) gold coinage amounted to twenty-one millions sterling. The following paragraphs from the well-informed city writer of the Daily News gives the latest facts, and properly draws attention to their important character:
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> "By the present bill, the German government is certainly paying England the compliment of adopting its single gold standard, but the cost of the measure to the London and other money markets cannot but be great. As the annual money supply of gold

throughout the world is reckoned at little more than £20,000,000, and the usual demand for miscellaneous purposes is very large, it follows that, if the German government perseveres in its policy, the strain upon existing stocks and currencies will be most severe. Unless the annual production of gold should suddenly increase, the money markets of the world are likely to be perturbed by this bullion scarcity."

These inevitable consequences of the policy of Germany, and of the United States and other countries co-operating with Germany, have been and are now being realized as predicted. But strange to say many of those who foresaw and predicted them now deny what the whole world knows to be true, that paralyzed trade and stagnant industry, the necessary accompaniments of "*prices and wages constantly tending toward decline*," are the natural results of the demonetization of silver, which began in injustice and is culminating in disaster. The folly of that policy is only equaled by the folly of hoping that prosperity can be restored while that main and principal cause of existing evils is still at work. What is doubtful is whether even with the use of both gold and silver there may not be a most injurious "*pressure of transactions and commodities on the precious metals*." The fatal effects of discarding either of them are only too clear, and those who advocate it are, wittingly or unwittingly, the enemies of the human race.

A general view of the industrial prostration in Europe, dating with 1873, is presented in the annual tables of the *Moniteur des Interets Materiels* of Brussels, a very high authority, of the offerings in the European markets of new shares and new bonds in industrial undertakings, such as mines, railroads, and manufactures. These figures, which, if not absolutely correct, are likely to exhibit accurately the proportions between different years, are as follows:

1872	$968,362,500
1873	897,450,000
1874	432,450,000
1875	147,637,500

The United States, even if its paper currencies had been left undisturbed, could not have escaped grievous injury from the demonetization of silver. The heavy interest account on its indebtedness held in Europe must be paid by the export of products and their sale at metallic prices, which were certain to fall, and have fallen, through the pressure brought upon European gold markets by the adoption of the single gold standard in Germany and other countries. But the paper currencies of this country were not left undisturbed. On the contrary, they had been constantly and largely contracted from the close of the civil war down to 1873, and a shrinkage in the volume of accepted paper currencies has the same effect upon prices, productive industry, and prosperity as a shrinkage in the volume of metallic money. Between 1864 and 1875 the population of the country using the national currency was nearly doubled by the addition of the people of the Confederate States in 1865, and by the natural increase of both the sections afterward. As a consequence, the productive forces of the country and the demand for money to measure and exchange the fruits of its augmented industry were increased, if not in as great a ratio, at any rate very largely. But during this period the volume of paper currencies was steadily shrinking in the United States, while the metallic money of the specie-paying countries of Europe was undergoing the same process.

Later on, the specie-resumption act (January 14, 1875) was passed. Its true character, as now interpreted, was neither avowed in Congress nor understood by the country at the time of its passage. The phraseology of the act created the impression that there was to be no reduction of the aggregate of paper money, but that legal-tender notes were to be diminished only as bank-notes were increased. As the act is administered in practice, both classes of notes are being reduced at the same time, while the population of the country is expanding. The words of the act may justify this method of administration, but it was not with that understanding that it was sanctioned by Congress.

A more fatal misconception grew out of the ignorance that prevailed almost universally until after the passage of the resumption act, that silver had been demonetized, and hence, that a law providing for specie payments was really a law for gold payments. The people were not aware that coin then meant gold, and that coin payments involved the shriveling of all values to the measure of a single metal. They were in favor of resumption but not confiscation, and they were not aware that resumption as proposed was but another name for spoliation. Although the period fixed for this spoliation was nominally in the future, it actually commenced at once and is now proceeding day by day. It having been made certain, so far as the law could make it certain, that each dollar of the actual money of the country would, on a given day in the near future, be raised to the value of a gold dollar, the universal tendency was, and has continued to be, to change all forms of property into money, and to refuse investment in either property or productive enterprises. Moneyed capitalists, knowing the disastrous effects which the impending fall in prices would have on the financial condition of borrowers, prudentially withdrew or diminished all credits and hastened to realize on securities. They have never been deceived for one moment by the idle fallacy that resumption in gold involved an appreciation in the value of the legal-tender notes and a fall in prices only to the extent of the present difference between the value of those notes and gold. They know that the appreciation of legal-tender notes must reach that vastly higher level which the value of gold must reach when hundreds of millions of it are demanded for resumption, and that prices will sink to a corresponding point of depression.

It is through these plain processes, that he who runs may read and understand, that the crushing effect of the demonetization of silver is already felt, although practically and legally the money of the United States is still paper. It is through these plain processes, although real resumption in gold is neither possible January 1, 1879, nor on any other day, except through a great and improbable increase of the world's stock of gold, or on the basis of universal ruin, that every effort made to reach such resumption by locking up paper or gold, is a disastrous step toward bankruptcy. It is through these plain processes that the stagnation and paralysis in commerce and industry everywhere visible, which had already been brought about by a contraction in the volume of money, are being aggravated and intensified as the time approaches for that unknown measure of contraction which will be absolutely necessary to render the paper money of the country constantly convertible into a stock of gold that must be ruinously meager, unless some great commercial country shall consent to suspend specie payments for our especial benefit.

CONCLUSIONS.

Upon the facts and considerations hereinbefore set forth, and after carefully weighing the views presented to them orally and in writing by various persons, the commission submit the following answers to the questions referred to them by Congress:

1. The first question relates to the causes of the recent change in the

relative value of gold and silver, and to the effect of that change upon "trade, commerce, finance, and productive interests of the country."

This commission concur in the following opinion of the British silver commission, (1876:)

> Notwithstanding the late rise in the production of silver as compared with gold, its proportion to gold is still considerably below what it was in 1848, to say nothing of the period when the proportion was 3 to 1; and the conclusion seems justified, that a review of the relations of the metals in times past shows that the fall in the price of silver is not due to any excessive production as compared with gold.

It is not now seriously maintained anywhere that any recent fact in the production of silver is among the causes of its decline relatively to gold.

The causes of the recent change in the relative value of gold and silver are mainly the demonetization of silver by Germany, the United States, and the Scandinavian states, and the closure of all the mints in Europe against its coinage. These principal causes were aided by a contemporaneous diminution of the Asiatic demand for silver, and by enormous exaggerations of the actual and prospective yield of the Nevada silver-mines. The effect of all these causes, principal and accessory, reached its culminating point in the panic of July, 1876, in the London silver-market. Many of these causes are essentially temporary. The Asiatic demand for silver has already recovered its accustomed force, and the delusions in respect to the Nevada mines no longer exist. In the opinion of the commission, if the United States restore the double standard, the spread of the movement in favor of a single standard of gold will be decisively checked. The effects of the demonetizations so far accomplished, and of the resulting disturbance of the relative value of gold and silver, upon trade, commerce, finance, and productive interests in this country and throughout the commercial world, have been signally disastrous, and especially to the countries which have recently demonetized silver, or in which the gold standard was already established. In all commercial countries the same phenomena are simultaneously presented, of falling prices of commodities and real estate, diminishing public revenues, starving, poorly-paid, and unemployed laborers, and rapidly-multiplying bankruptcies. These facts existing everywhere must arise from some cause operating everywhere, and no such cause is or can be pointed out except the decrease of the metallic supplies from the mines, and consequently the decrease of metallic money relatively to population and commerce since about 1865, and the larger and more sudden decrease of metallic money caused by the partial destruction of the money functions of one of the precious metals. This distress dates with the law of the United States of February 12, 1873, and the law of Germany of July, 1873, giving practical effect to a previous decree of that empire of December 4, 1871, for the establishment of a single gold standard. The stationary or declining production of the metals had already produced a stringency in the metallic money-markets of the world, and as money stringency and panic are near neighbors, the demonetization of one of the metals broke down the partition between them. The demonstration of the nature of the mischief seems complete. What the world has witnessed immediately following a concerted movement to demonetize silver, is that fall in prices, ruin of productive interests, and increase in the absorbing power of moneyed capital, which could not fail to attend a sudden narrowing of the measure of values. Prior to 1873 prices were regulated by the general existence of a measure of values consisting of the two metals, of about equal proportions in the world's stock. To annihilate the monetary function of one must greatly increase the purchasing power of the other, and greatly reduce prices. As all debts, public and private, in Europe and America had been contracted while the double standard was in practical operation, their weight, always burdensome, became crushing when made solvable exclusively in one metal. Silver, to the amount of three thousand million dollars in coin, the accumulation of fifty centuries, is so worked into the webb and woof of the world's commerce, that it cannot be discarded without entailing the most serious consequences, social, industrial, political, and commercial. The evil is enormously aggravated by selecting gold as the metal to be retained, and silver as the metal to be rejected.

The supply of gold is diminishing, being now but little more than half what it was in 1852, and is always so fitful and irregular from the method of its production that it is ill suited to be a sole measure of values. Placer-washings require little or no capital, and are soon exhausted. Silver, on the other hand, is found in veins which extend to great depths, the development of which can neither be commenced without capital nor abandoned without the loss of heavy investments. Its production is, therefore, comparatively steady and permanent, and it is this steadiness in the production of silver, together with the vast stock in use as money throughout the world, which is the moderator of the fluctuations of gold, and which, during the sudden and enormous additional supplies of gold since 1848, saved the commercial world from ruinous disaster. The Californian and Australian placers would have inflicted practical confiscation upon the creditor classes if the silver, which many of them now seek to discard, had not protected them.

The exchanges of the world, and especially of this country, are continually and largely increasing, while the supplies of both the precious metals, taken together, if not diminishing are at least stationary, and the supply of gold, taken by itself, is falling off. To submit the vast and increasing exchanges of this country and the world to be measured by a metal never reliable in its supply, and now actually diminishing in its supply, would make crisis chronic and business paralysis perpetual.

2. The second question covers the two points of the restoration of the double standard in this country, and of the best legal relation between gold and silver. The commission recommend the restoration of the double standard and the unrestricted coinage of both metals, but are unable to agree upon the legal relation which should be established between them. The views of individual members of the commission upon this last point are hereto appended.

3. The third question relates to "the policy of continuing legal-tender notes concurrently with the metallic standards, and the effects thereof upon the labor, industries, and wealth of the country." The commission do not suppose that it is possible to maintain paper in actual concurrent circulation with coin, unless the paper is made equal in market-value to coin, by actual convertibility into it, and that the answer to this question may be embraced in the answer to the fourth and last question, which relates to the resumption of specie payments.

4. The fourth question covers "the best means for providing for facilitating the resumption of specie payments." The opinions of the witnesses examined upon this point, and the views upon it which are contained in written communications addressed to the commission, are various and contradictory. The experience of other countries furnishes little aid in reaching conclusions which can command confidence. The fact in regard to paper money issued directly by governments and having a forced currency seems to be, that it has seldom been redeemed in coin. To redeem the paper issues of a country and keep the coin in circulation has

always been regarded as a very delicate and difficult operation. In the two empires of the present day, covering the greatest extent of territorial area, Russia and Brazil, such paper money has existed, in the first for a century, and in the second for about half that time. In Russia there have been large issues and occasional redemptions at a percentage. In Brazil the paper seems to have been maintained at a close and steady approximation to the value of coin. The only conspicuous example of a government resumption is that of England in 1821. The suspension of coin payments in that case was not in form that of the government, but in substance it was so, from the intimacy of the relations between the government and the suspending Bank of England. The government itself gave up coin payments and tendered nothing to the holders of national obligations but depreciated bank-notes. Nothing seems to be certain, except that the British resumption of 1821, as it was actually accomplished, was followed by an unexampled commercial and industrial depression, covering nearly the period of a generation. The economical writers and authorities of that country do not agree that the resumption was finally effected in the most judicious mode, and still less do they agree as to what would have been a better mode.

It is not possible, therefore, to draw from that historical example much to enlighten us as to the proper policy to be now pursued by the United States. The commission have been able to arrive at only the one single conclusion, that resumption in this country is not practicable under the circumstances, until the existing laws making gold the sole metallic legal-tender are repealed. Resumption, while those laws remain in force, is the establishment of an exclusive gold standard in the United States, just as English resumption in 1821 gave effect to the English gold-law of 1816. That the two precious metals together are adequate to maintain existing prices is made at least doubtful by the fact that so many countries have abandoned coin payments within recent years, and have resorted to paper money. The total inadequacy of gold alone is apparent. Germany, Great Britain, and France are the only countries in the world which have any considerable quantity of it, and the maximum estimates of the aggregate amount they have in coin and bars will not exceed $1,300,000,000. It is not suggested that there are any available and disposable quantities elsewhere. In the opinion of the commission, the total quantities in the Western World are much exaggerated in the average estimates of statisticians.

Germany commenced its march (not yet completed) to a single gold standard unembarrassed by national debt or foreign debt of any kind, and with a tribute exacted from France of $1,000,000,000. If the German movement, under these favoring circumstances, has resulted in such great commercial disturbance and such general distress, it can scarcely be estimated what financial disasters will befall this country if it shall persist in a similar movement under the weight of enormous debts, public and private. In the opinion of the commission, the remonetization of silver is a measure essential to specie payments and may make such payments practicable. Both gold and silver are found in our own territory, and their production is among the most important of our industries, and both are needed and in the fullest measure to render the resumption of specie payments possible. The problem of resumption is not an easy one under any conditions, but the energies of the American people may be found equal to it, if they are not deprived of one-half of their ancient and constitutional money.

The commission believe that the remonetization of silver in this country will have a powerful influence in preventing, and probably will prevent, the demonetization of silver in France and in other European countries in which the double standard is still legally and theoretically maintained. But if, notwithstanding remonetization here, further European demonetization shall take place, the result for us will be an advantageous exchange of commodities which we can spare, for money which we need. The silver of Europe, disposable in the event of further demonetizations of it on that continent, will come to us, if at all, in payment for commodities, and in transactions which will be free and voluntary on the part of our citizens, who may be trusted to take care of their own interests.

Such transactions will give a much-needed stimulus to our commerce, and cannot fail to be made on terms which will be advantageous to us. Nations cannot suddenly dispose of a considerable mass of either metal without a loss from the temporary fall in its price, and this loss becomes the profit of the purchasers when the old price is recovered. Being flooded with the silver of Europe—now treated by many persons as an alarming danger—is being flooded with one of the precious metals and with money, if silver is remonetized in this country. Silver is the same thing, whether obtained by commerce with Europe or from the mines of America, and those who oppose our receiving it from abroad must wish to see our mines closed at home.

If the states of the Latin Union, or other countries in Europe, abandon the double standard after we re-adopt it, or because we re-adopt it, it will be a policy on their part through which great advantages will inure to us and great disasters will befall them. It would inaugurate in the United States an era of prosperity, based upon solid money, obtained on profitable terms, and under circumstances necessarily stimulating to our industry and commerce.

Finally, the commission believe that the facts that Germany and the Scandinavian states have adopted the single gold standard, and that some other European nations may possibly adopt it, instead of being reasons for perseverance in the attempt to establish it in the United States, are precisely the facts which make such an attempt entirely impracticable and ruinous. If the nations on the continent of Europe had the double standard, a gold standard would be possible here, because, in that condition, they would freely exchange gold for silver. It was that condition which enabled England to resume specie payments in gold in 1821. The attainment of such a standard becomes difficult precisely in proportion to the number and importance of the countries engaged in striving after it; and it is precisely in the same proportion that the ruinous effects of striving after it are aggravated. To propose to this country a contest for a gold standard with the European nations, is to propose to it a disastrous race, in reducing the prices of labor and commodities, in aggravating the burdens of debt, and in the diminution and concentration of wealth, in which all the contestants will suffer immeasurably, and the victors even more than the vanquished.

JOHN P. JONES.
LEWIS V. BOGY.
GEORGE WILLARD.
R. P. BLAND.
WM. S. GROESBECK.

Opinions of Messrs. Jones, Bogy, and Willard concerning the legal relation of value which should be established between the metals.

In the opinion of the undersigned, the proper legal relation of value to be established in the United States between silver and gold is 15.5 to 1.

That is the legal relation in all the double-standard countries of Europe, with the single exception of Holland, where the double standard has been provisionally established with a relation of 15.6 to 1. It would be unreasonable to expect France, whose legal relation between the metals of 15.5 to 1 has existed since 1803, and whose actual metallic circulation approximates $1,000,000,000, to assent to a change of the relation, which would compel the recoinage of either the gold or silver portion of that vast stock. The states of the Latin Union, including France, are, in fact, restrained by treaty until 1880 from changing the relation. Indeed, it is not suggested by anybody that it is probable or reasonably possible that the double standard will be maintained in Europe upon any other relation than 15.5 to 1. It is certain, therefore, that when the mints of Europe are again opened to the unrestricted coinage of silver, the London price of silver must again become 60.87 pence in gold per ounce, or substantially that.

If we resume the coinage of the silver dollar with a weight of 412.5 grains, and the gold dollar remains unchanged. It will give a relation between the metals of 15.98 to 1, and a legal valuation to silver of 59 pence per ounce in gold. This would make the market or bullion value of silver 3 per cent. greater than its mint or legal value. The result would be, that no silver would be coined in this country, and even if it were coined could not be kept in circulation, but would be sure to be exported. This is just what happened after the relation of 15.98 to 1 was established here by the acts of 1834 and 1837, and is certain to happen again if we re-establish that relation, and if the double standard with unrestricted coinage is maintained in Europe.

A law of the United States remonetizing silver, but on a relation which would prevent its circulation if the mints of the double-standard countries of Europe were re-opened to the coinage of silver, would tend to keep those mints permanently closed to silver. We cannot expect France to coin it, if we practically refuse to coin it in concert with Europe, by fixing a relation under which coinage here would be practically suspended.

If the gold dollar is not changed, the bullion value of a silver dollar of 412.5 grains must again be 103 cents in gold whenever the double-standard countries of Europe open their mints to the free coinage of both metals, and our silver would flow away and would not return unless through some extraordinary demand in gold-standard countries, arising from commercial or financial revulsions the value of gold should advance to a parity with it. The effect of such a demand would be, of course, to drain away the gold of this country, but we could not obtain any relief through its replacement by silver until the drain had proceeded far enough to raise the value of gold fully three per cent. On the contrary, if our relation should correspond with the general relation of double-standard countries, silver would flow into or out of the United States upon the slightest change in the relative value of the two metals. Upon the first call upon us for gold to meet extraordinary demands from gold-standard countries, silver would flow in to take its place, and under like circumstances, upon the first call upon us for silver from silver-standard countries, gold would flow in to take its place. The equilibrium of value between the metals would be thus maintained, and the steadiness of our money-markets would be protected from shocks, arising from the special demands of foreign countries for a particular metal. This is an inestimable advantage which the United States has not enjoyed since the acts of 1834 and 1837, and not fully since 1803. The equivalency thus established in the market-value of gold and silver coins, would enable the country to avail itself of both at the commencement of financial difficulties, instead of being compelled to wait until those difficulties had worked great hardships.

When the coinage of silver is resumed in this country, it should be at such a relation with gold as would be most likely to insure stability and permanency, as these qualities are of prime importance in every monetary system. The immense sum of silver already coined in Europe at the relation of 15.5 to 1 is the strongest possible guarantee that this relation, if once established in the United States, would be sustained without change.

The policy proposed by some, of the resumption of coinage at the relation of 15.98 to 1 for the present, with a view to a change of that relation hereafter by an international conference, the undersigned believe to be unwise, not only because such change would involve the cost and inconvenience of the recoinage of the silver which had already passed into circulation and become the practical measure of value, but because it would impair the public confidence in a monetary standard, the stability of which would be discredited in advance by the impression that the coinage relation of the metals was merely temporary and soon to be subjected to revision.

The relation of 15.5 to 1 may be established here, either by reducing the weight of the silver dollar from 412.5 to 399.9 grains, or by increasing the weight of the gold dollar from 25.8 to 26.6 grains. The undersigned are not insensible to the difficulties attending either mode of accomplishing the object.

If the weight of the gold dollar is increased, it will involve the inconvenience and expense of reminting a very large amount of gold coin.

While the undersigned are firmly convinced that the parity of gold and silver coins at the relation of 15.5 to 1 would be assured and permanently maintained; yet, should any difficulty arise from the coinage of a silver dollar of 399.9 grains, in the adjustment of contracts to make payments in coin of the weight and fineness existing at the date of such contracts, it may easily be remedied by appropriate legislation.

On a full consideration of the advantages and disadvantages of the two modes of reaching the relation of 15.5 to 1, the undersigned are of opinion that the weight of the silver dollar should be reduced to 399.9 grains.

It may be added that a legislative remonetization of silver on the relation to gold of 15.5 to 1 accomplishes without delay all the objects of the proposition for an international conference, which is urged from various quarters. If such a conference resulted in anything, it would be in the agreement of the United States to adopt this European relation of 15.5 to 1, as it neither can be nor is expected that Europe could be persuaded by any conference to give up that relation and adopt the old American relation of 15.98 to 1. The adoption here of the relation of 15.5 to 1 by an act of legislation, would be the most authentic and decisive offer of accord with the European countries of the double standard which could possibly be made. It would be not merely the offer of an accord, but the actual establishment of one.

An international conference can only be an advisory body. Under our Constitution, this country cannot be represented in it by any functionary having any greater power than that of recommendation. The relation of the metals can be regulated only by Congress. It is not within the treaty powers of the President and Senate, and it is only by the enactment of a law that an effective proposition can be made to

Europe of the double standard on a uniform relation of the two precious metals.

As already indicated, the undersigned believe that the United States should remonetize silver, whatever the future policy of Europe may be. At the same time they believe it to be wise to make to Europe the offer of an accord upon the relation of the metals, and that this offer can be best made by the enactment of a law fixing 15.5 to 1 as the relation here.

But diversities of opinion as to the proper relation between the metals, and as to the one most likely to secure permanency and steadiness of value, should not be insisted upon to the extent of endangering the passage of a bill remonetizing silver at any relation which has been proposed. The great object is the remonetization of silver. Its precise legal relation of value to gold is of far less importance.

JOHN P. JONES.
LEWIS V. BOGY.
GEORGE WILLARD.

Opinions of Mr. Groesbeck, concerning the legal relation of value which should be established between the metals.

In the foregoing report we have recommended that silver be restored to equal rank in our currency with gold, and made a legal tender for all debts, public and private. The wisdom and safety and necessity of such a course, in order to do exact justice between creditors and debtors, to encourage and sustain industry and enterprise, and aid and prepare for resumption of specie payments, cannot be too strongly urged. We have had the single standard of gold for the last three years, but having been in suspension during that time, it is as yet untried. We had the double standard during all else of our national life. It was long and well tried, and I have not been able to find that we ever suffered the least harm from the use of both gold and silver as legal-tender money. On the contrary, we greatly prospered with them. They are the currency contemplated by the Constitution of the United States; the currency named in our State constitutions; and the currency to which our people are accustomed and with which they have been always satisfied. It was upon no demand of theirs that silver was demonetized, and we have recommended that it be restored to them.

While we have agreed on this, we have differed as to the relation which should be established between the two metals. Some of the commission recommend that the old silver dollar be reduced from four hundred and twelve grains and a half to three hundred and ninety-nine grains and nine-tenths.

The gold dollar and the old silver dollar stood to each other in the relation of 1 in weight of gold to $15\frac{98}{100}$ in weight of silver, say 1 to 16. The gold dollar and the silver one now recommended by a part of the commission, would stand to each other in the relation of 1 to $15\frac{1}{2}$. In a word, the proposed new silver dollar would be three per cent. in value below the old one.

I cannot concur in recommending this change, but adhere to the old dollar.

It is objected that it contained too much silver, and by reason of this was at a constant premium in the market over the gold dollar, and therefore would not circulate here, but left the country as bullion. This may be so; but it sent back to us in exchange for itself, its full value in gold and merchandise. We are rich in silver, and can afford to repeat such transactions in the future.

It is not to be overlooked that quite recently silver was greatly depreciated, and that it is yet a little below par in comparison with gold. Some still doubt the stability of silver, and many are partial to gold, and the history of these metals will show there has been a slight widening in their relative value. Law can do much to control this tendency, and to fix and hold them, when both are used as money, in a steady relation to each other; but no statute law can make the relation unchangeable. A great abundance or a great scarcity of one or the other, and the extent of its use, will in some degree affect its value. In view of this tendency, and in the present condition of the metals, we are not called upon to narrow their relation to each other, but should keep our silver dollar as rich in silver as it was before its demonetization. It may be that its remonetization at the relation between it and gold of 1 to 15½, the European or French relation, would bring it abreast with gold, and keep it there; but I must insist that remonetization, at our old relation of 1 to 16, would be quite as certain in its results, and, in view of the apprehension yet lingering in the minds of many, more just and acceptable.

It is urged that we should adopt the relation of 1 to 15½, because it is the relation of the Latin Union, and its adoption by us would strengthen France and her associates in their position, and so strengthen ourselves also. It is admitted that the utmost attainable steadiness should be secured in the relation that may be adopted for the two metals, and this result is best secured when different nations using the double standard adopt the same relation. Such a policy may be indispensable in the Latin Union, composed of nations adjoining each other, though Holland, which lies in contact with the Latin Union, maintains a slightly different relation without serious embarrassment. We are so far removed, that this policy would seem to be secondary to other considerations especially applicable to our own case. And I venture to add, that if the United States and the leading nations of Europe, including the Latin Union, were now assembled in a convention to consider this subject, they would, in view of the present market value of the two metals, prefer our own relation, as being the more accurate and just.

Until a convention as largely attended as the one just suggested shall take this matter into consideration, we may safely remain on our own relation. It answered in the past; it will answer in the future, and we are strong enough to maintain it. About all we should undertake at the present time, is to undo the recent legislation demonetizing silver and restore it to its exact former position. This course is very simple and avoids all embarrassments. In a bill recently passed in the House by an overwhelming majority, the work is already half done, and the shortest way to the restoration of silver is to complete that work. A proposition to reduce the size of the dollar throws that work aside, and by offering a new scheme invites discussion, division, and delay, and may in the end endanger remonetization of any kind.

Another plan suggested by one of the commission is to do nothing for the present, and remit the subject to the consideration of some international convention that may never be held, and wait for its doubtful and distant recommendations. There has been an international convention not unlike the one now proposed. It was held in Paris in 1867. Not less than twenty nations attended it, including all the leading nations of Europe and the United States. Its deliberations were careful, its discussions able, its results practically nothing. Such a plan for disposing of a subject of local urgency and pressing for settlement, may be regarded as tantamount to its indefinite postponement.

A word more about resumption of specie payments. Much testimony was taken on this inquiry, and we present with the report the views of able and experienced gentlemen. There is wide diversity in these views, and it seemed to a majority of the commission that the true and best method of resumption had not yet developed itself enough to come into clear view. In one opinion they heartily concurred: Resumption must wait upon remonetization.

W. S. GROESBECK.

Opinions of Mr. Bland concerning the legal relation of value which should be established between the metals.

While I appreciate the importance of conforming our monetary system to that of other countries in so far as to adopt the relation of 15½ to 1, as recommended by some other members of the commission, yet for reasons so ably presented in Mr. Groesbeck's paper, in which for the most part I concur, I fear we would endanger the success of the movement to remonetize silver in this country, should we now attempt to change the relation existing when so many of our debts, public and private, were contracted; for whatever silver dollar we authorize, should in all respects, in law, be equal to the gold dollar in the discharge of all debts public and private, past and future. Otherwise the bimetallic system would prove a failure.

R. P. BLAND.

MINORITY REPORT OF MR. BOUTWELL

The undersigned, a member of the commission appointed "to inquire into the change which has taken place in the relative value of gold and silver, and the causes thereof, the policy of restoring the double standard in this country, and of continuing greenbacks concurrently with the metallic standards," having been unable to agree to the conclusions reached by the majority of his associates upon that commission, respectfully submits to the Senate the following statement of his views:

The attention of the commission has been directed chiefly to three subjects of inquiry:

First. To the expediency of authorizing the coinage of a silver dollar, and making it a legal tender in the United States for all purposes except such as are otherwise specially provided for by law or by contract.

Secondly. To the expediency of inviting the governments of countries with which we are in intimate commercial relations to join us in an international convention for the purpose of considering whether gold and silver should be adopted as a standard in all such countries upon a fixed relative value of the two metals.

Thirdly. To the probable influence of the first and second propositions respectively upon the ability of the Government to resume and maintain specie payments.

The undersigned entertains the opinion that it is not now expedient for the Government of the United States to authorize the coinage of the silver dollar in the manner and for the uses stated in the first proposition.

The undersigned is also of opinion that it is expedient for this Government to extend an invitation to the commercial nations of the world to join in convention for the purpose of considering whether it is wise to provide by treaties and concurrent legislation for the use of both silver and gold in all such nations upon a fixed relative valuation of the two metals; and, finally, that until such an agreement between this Government and other commercial nations can be effected, the United States should pursue the existing policy in regard to the resumption of specie payments.

It is not material in the present inquiry to search for the reasons which control mankind and lead them to the conclusion very generally entertained that gold and silver are better adapted than any other articles for use as measures of value. The existence of this opinion must be admitted; and, proceeding one step further, it is equally true, if not generally so accepted, that gold is everywhere a standard of value, while in many countries silver has been rejected. It follows, therefore, that the theory of its equality with gold in this respect cannot be maintained. Even in countries where silver is used as a coin and endowed with the quality of being a legal tender, it is yet an article of commerce, and its value in all foreign transactions is measured by gold and tested by the gold standard. During the last three years there have been great variations in the commercial value of silver, but it is useless to inquire whether such variations are due to a fall in the value of silver or to a rise in the value of gold. Gold being the only universal standard or measure of value, all other articles are tested by it, and however the standard may change, yet so long as it is accepted as the standard, the relation which other articles, including silver, bear to it is one of fact, and all theories in regard to values must conform to the fact.

Human experience furnishes uniform testimony in support of the proposition that thus far no country has been able to maintain two standards of value in actual use at the same period of time; and in every country which has adopted a bimetallic standard, that metal has been used, to the exclusion of the other, which was overvalued as a coin as compared with the value of the bullion contained in the coin when tested by its market-price in other countries of the world.

The consequence has been that in every country where the bimetallic standard has been adopted the overvalued metal as coin has been used to the exclusion of the other.

At present the gold dollar of the United States, which contains $25\frac{8}{10}$ grains of standard gold, will purchase a larger quantity of pure silver than is contained in the dollar of $412\frac{5}{10}$ grains standard silver.

The superior value of the gold dollar would prevent its use, and the gold coin and gold bullion of the country would at once be exported to other countries and silver in exchange would be returned, and, when coined, it would be introduced into the circulation of the United States.

The demonetized and discarded silver of every other country would flow to the United States, and there can be no doubt that after the first effect of its remonetization here had passed away it would steadily depreciate in value. Nor can there be a doubt that our unfortunate experience would furnish an argument against the remonetization of silver by the commercial nations of the world. It is contended by those who advocate a bimetallic standard for the United States without regard to the policy of other countries that its use by us would so advance its value in the markets of the world that it would be at par with gold. It can only be said in answer to this assumption, that there is no evidence that such would be the result, while, on the contrary, it is reasonable to anticipate that the demonetization of silver in Germany, the limitation of its coinage by the nations of the Latin Union, its reduced value in India, and the large production in America, would counteract the effect of an increased demand for coinage in the United States, and that in a period of ten years its relative value to gold would be less than it now is.

In the present age, with the existing facilities for communication between the different parts of the world, it is the first necessity of a commercial people that their standard of value should be of itself accepted by other commercial nations.

The utility of either of the precious metals as a standard of value is chiefly, if not altogether, in two particulars: first, for the purpose of redeeming the paper currency of the country, whatever it may be; and, secondly, and mainly, for the purpose of liquidating balances with other countries.

It is to be observed, in connection with this statement, that when the paper currency of a country is redeemable in coin at the demand of the holder, the occasion for such redemption arises almost entirely from the circumstance that coin is wanted for the settlement of foreign balances, and, therefore, it may be said that the great advantage to be derived from the resumption of specie payments is to be found in the facility which will be thus afforded for the transaction of business between citizens of the United States and the subjects and citizens of other countries, and, that any scheme of resumption which does not produce this result, fails altogether to meet the demand of the times.

As long as silver is merely an article of commerce in Great Britain, where our bills due to other countries are finally adjusted, the use of silver as a standard in this country will fail to produce any of the important results which ought to flow from the resumption of specie payments.

The resumption of specie payment means, or should mean, that the paper currency of the country is redeemable at the will of the holder in coin, which will be received in payment of debts due to other countries, and at its nominal value. To say that the holder of a United States note can obtain silver for the note, and that with the silver he can purchase gold and pay a debt due in London, is, in fact, a statement that he could then do what can now be done. The holder of a United States note can purchase gold, and with the gold he can pay his foreign debts.

London is the financial center of the world, and while there are two theories as to the sources of its power in this particular, neither theory affords any support to the policy of using silver as the standard of value in the United States. One theory is that the act of the British Parliament of 1816, by which gold alone was made the standard of value, was the foundation of the commercial and financial pre-eminence of England.

While the undersigned does not concur in this opinion, he thinks it proper to state that if Great Britain is indebted for her commercial and financial supremacy to that act, the success of her policy would justify and require its imitation by the United States at the present time.

The undersigned, however, is of opinion that the financial supremacy of England is due largely, if not entirely, to her policy in encouraging manufactures and fostering and extending her maritime power.

It remains, however, to be said that the accumulations of capital are greater in England than with us; that credits for commercial transactions over the whole world can be obtained more cheaply there than elsewhere; and that while her pre-eminence in these particulars remains London will continue to be the clearing-house for other countries. Inasmuch as balances there must be settled in gold, it would seem wise for other commercial nations to make that metal the sole standard of value, or by a general agreement, to which England should be a party, secure the adoption of the bimetallic standard.

In addition to the results which will follow the introduction and use of silver coin in the United States, to which reference has already been made, the undersigned cannot omit to notice the effect of the measure upon the public faith and credit of the country.

By the act of the 25th of February, 1862, it was provided that all duties on imported goods should be paid in coin, and that the coin so received should be set apart as a special fund and applied to certain purposes. These were, first, to the payment in coin of the interest on the bonds of the United States; and, secondly, to the purchase or payment of one per centum of the entire debt of the United States, the same to be set apart as a sinking-fund, the interest on which in a like manner should be applied to the purchase or payment of the public debt, as the Secretary of the Treasury should from time to time direct.

After the passage of the act of 1834, by which an increased value was given to gold as compared with silver, the standard of value practically was gold, the only use for silver being in the circulation of subsidiary coins, which were in fact tokens, after the act of 1853, the weight then being so light as to preclude their purchase and use as bullion.

At the time of the passage of the act of 1862 gold was the only coin in circulation and the only standard of values in the country. Customs receipts were in gold exclusively, and they have been so collected from that time to the present. The interest upon the public debt has been paid uniformly in gold coin. Although there was authority for the coinage and use of the silver dollar containing $412\frac{5}{10}$ grains of standard silver, yet, as a matter of fact, its coinage had been suspended, and the overvalued gold coin had been substituted universally in its place.

Public creditors may very well claim that they are entitled to receive in payment of the interest and principal of the public debt the gold coin of the standard value authorized and in circulation at the time that the act of 1862 was passed.

The undersigned is of opinion that the adoption of silver as the standard would be followed by a loss, in the depreciation of the public credit, far greater than any gain to the Government by the payment of the interest and principal of the public debt in a coin less valuable than gold. Indeed, the depreciation of the public credit proceeding from acts of imputed bad faith, whether properly so imputed or not, cannot be compensated by any pecuniary gain, however large.

It is to be observed, further, that the duties on goods imported, if collected in silver, would be subject to the variations attending the market price of silver as compared with gold in other countries, and especially in England, where gold is the standard of value. The consequence of such a fluctuation to the manufacturers of the country and to merchants engaged in importing goods can be easily foreseen.

One of the chief objections to the irredeemable paper currency of the country is in the fact that the importer can never be assured that the price at which he sells his goods will be equal, when converted into gold, to their cost with the duties in gold added. But this condition of things does not affect materially the domestic manufacturer. The substitution of silver, however, and its use in payment of duties, would leave the domestic manufacturer constantly exposed to the effect upon business and profits produced by the changes that would certainly take place in the value of silver when measured by the gold standard.

There can be but one standard of value in any country at the same time, and a safe and successful use of gold and silver simultaneously can be effected only by their consolidation upon an agreed ratio of value and by the concurrence of the commercial nations of the world.

While, in the opinion of the undersigned, it is desirable to secure the use of the two metals by the concurrent action of the commercial nations, he does not entertain the opinion that any serious evils will come to us from maintaining the existing policy in regard to gold and silver. We are now upon a gold standard, and although the paper currency of the country is depreciated to the extent of five or six per cent., there has been, upon the whole, a constant improvement in its value since the close of the war.

During the last three years there has been a depression in business, but that depression is not due to the currency of the country, the evidence of which is found in the fact that a like depression in kind and degree has occurred in Great Britain, Germany, and in parts of Asia.

It is to be said, further, that recently a considerable improvement in business has taken place in this country without any change in our policy touching the currency. That improvement will no doubt go on, and should the balance of trade between this and other countries continue in our favor, there will be a constant appreciation in the value of our paper money as compared with gold.

During the last year the paper currency of the country, as compared with gold, has been as valuable for commercial purposes as silver of the standard proposed; and the substitution of silver for paper would increase the cost of the currency of the country for domestic purposes, impair our credit, disturb the confidence of the world in the faith of the Government, diminish the value of our securities in the markets, and in the end leave us in a less favorable condition to compete with Great Britain for commercial and financial supremacy.

It should be borne in mind that a metallic currency is more expensive than paper, and that the chief use of the metals, whether one or both are employed, is to measure the value of the paper which is and ever should be the chief instrument for the transaction of business.

Therefore, if it be designed to substitute silver for paper as the actual currency of the country, the measure will be more expensive to the extent of many million dollars a year; and, if it is the purpose of the friends of a silver currency to merely provide silver for the redemption of the paper, no advantages will arise that will compensate in any considerable degree for the loss inevitably incident to or consequent upon the measure.

In the views heretofore presented the undersigned has indicated his opinion that it will be wise for the commercial nations of the world to agree upon the use of silver and gold as a standard and for all the purposes, the coinage to be free in each country, and unlimited in amount.

The testimony taken by the commission tends strongly to show that the annual product of the two metals combined is for a series of years more uniform than the annual product of either of the metals. This fact justifies the conclusion that the use of the two metals in the manner indicated will furnish a more unvarying basis for business than can be obtained by the use of either only.

It is no doubt true, also, that the demonetization of either metal adds to the purchasing power of the metal retained for use, by diminishing the price of every article of merchandise, while it increases the burden of debts, both public and private.

It is also true that the common use of the two metals furnishes a better basis for the paper currency of the respective countries, thereby rendering the transaction of business more safe, not only in the respective countries but between them, and diminishing the danger of revulsions and the suspension of specie payments.

In fine, every consideration which justifies and requires the use of a precious metal as a basis of business and a means of redeeming the promises of governments, corporations, and individuals seems also to justify the use of both metals for the same purposes, provided always that the use is universal or nearly so, and upon an agreed relative value of the two metals.

The evidence taken before the committee tends to show that there is a larger public sentiment in Europe in favor of the remonetization of silver than has heretofore existed, and that a proposition from the Government of the United States looking to a convention will be accepted by the governments of Europe, and that the result of the deliberations of such a convention will be favorable to the plan suggested.

On the other side, it is to be apprehended that the remonetization of silver by the United States at the present time would be followed by such a depreciation in its value as to furnish a reason against the adoption of the plan by the rest of the world; and that an independent movement on our part would increase the difficulties rather than diminish them. However that may be, the undersigned is of opinion that the introduction of silver as a currency should be postponed until the effort to secure the co-operation of other nations has been faithfully tried.

GEO. S. BOUTWELL.

MINORITY REPORT OF MR. BOWEN, CONCURRED IN BY MR. GIBSON.

Unable to accept the conclusions at which a majority of the Commission have arrived, the undersigned respectfully submits what follows as a Minority Report:

From the tables showing the monthly fluctuations in the London market-price of English standard silver (925 thousandths fine) per ounce, it appears that during a period of forty-one years, from January, 1833, to January, 1874, this price oscillated around 60*d.* per ounce, never falling below 58½*d.*, and never rising to 63*d.* Assuming the average price to have been 60*d.*, we find the ratio of value between silver and gold to have been as 1 to 15.7.* In 1874 the price of silver began to fall, though the decline did not become considerable till May, 1875, from which time, though with some fluctuations, the depreciation rapidly increased, till in July, 1876, the price touched 47*d.*, being a fall of 21 per cent., the ratio being then as 1 to 20. After July the price advanced again, till in December, 1876, it was about as high as at the beginning of the year.

Are these great and sudden changes in the relative value of the two precious metals attributable to a fluctuation in the value of silver, or in that of gold, or partly in both? This is the first question which it is the duty of the present Commission to consider.

In the opinion of the undersigned, formed after a careful examination of the evidence presented to this Commission, and to the select committee of the English House of Commons on the same subject, which made its report through Mr. Goschen last July, these changes must be attributed exclusively to a depreciation of silver, the fluctuations being such only as often accompany, at the outset, any considerable rise or fall in the market-price of a single commodity, before the reality and the precise amount of the alteration are definitely established.

Speaking generally, the value of anything is its purchasing power, or, in other words, its ratio of exchangeableness with other commodities. Whenever gold is the only standard, the average prices of commodities in general, after allowing for special causes of fluctuation in particular cases, indicate with sufficient precision the average value of gold. In fact, they do not merely indicate; they are that value. If there has been no recent panic in the market, no special cause of general depression of trade, a general fall of prices expresses a rise in the value of gold; and, conversely, if a fever of speculation has not for a time unduly stimulated the market, a general advance of prices is a fall in the value of gold. Now, during the fourteen months ending July, 1876, there was no general fall of prices in the London market corresponding to the great depreciation which then took place in the price of silver. In July, 1876, an ounce of standard silver would not purchase, either in London or New York, by about 17 per cent., so large a share of commodities generally as could have been obtained for it fourteen months before. But gold had not risen. An ounce of standard gold could have been exchanged for very little, if any, more of other commodities generally, excepting silver, than in May, 1875. Even if general prices were somewhat depressed during these fourteen months, they certainly did not then immediately undergo a far more rapid change in the opposite direction, reaching their former level in December of the same year. In all its essential features, the fluctuation in the price of silver was an isolated phenomenon, having nothing corresponding to it in the general course of trade.

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* An ounce of English *standard* silver contains 444 grains of the *pure* metal; and a sovereign contains almost exactly 113 grains of *pure* gold. Then 60*d.*, or one-fourth of a sovereign, contains 28.25 grains of pure gold, and the ratio of value between the two metals is as 28.25 to 444, or as 1 to 15.716+.

If we look at the circumstances affecting the relative demand and supply in the case of the two precious metals, we shall arrive at the same conclusion. During the last quarter of a century, the annual product of gold from the placers and mines has been so much in excess of the demand as to render it exceedingly probable that the value of that metal has been steadily, though slowly, falling, and that this decline is not even yet arrested. It is matter of the commonest observation, that the necessary expenses of living and maintaining a family have been constantly on the increase since 1851; the prices of commodities generally, reckoned in gold, have risen very considerably both in Europe and America. No one expects that they will recede again to what was their level before the discoveries of gold in California and Australia. The total annual product of gold in the world had risen from about 27 millions of dollars in 1849, to an average of more than 105 millions for the five years beginning with 1850, and to 136 millions as the average for the next five years ending with 1859.* What was the consequence of this enormous increase of the supply?

From the price-lists of the Economist newspaper, and from other sources, Professor Jevons, in his work on the Fall of Gold, published in 1863, compiled tables of the monthly prices of 39 of those chief articles of commerce, which may properly be regarded as necessaries of civilized life, and thus ascertained the average annual price of each of them for the whole period from 1845 to 1862, both inclusive. He thus proved that their prices had, "on an average, risen between 1845–'50 and 1860–'62 in the ratio of 100 to 116.2, which is equivalent to a depreciation of gold in the ratio 100 to 86, or by 14 per cent." He then took 79 minor commodities, less generally in use, the prices of which advance more slowly, since, as they are chiefly articles of luxury, an enhanced price diminishes their consumption; and taking the average of the whole 118 articles, the rise of prices, comparing the same two periods, was "found to be in the ratio 100 to 110.25, corresponding to a depreciation of gold in the ratio of 100 to 90.70, or by about 9⅓ per cent." He adds as the final result, "the lowest estimate of the fall that I arrive at is 9 per cent., and I shall be satisfied if my readers accept this. At the same time, in my own opinion, the fall is nearer 15 per cent."

Is there any good reason to believe that this fall in the value of gold has stopped, or has been materially retarded, since 1862? I think not. Taking the three periods of five years each which elapsed between 1859–'74, we find the average annual product of gold throughout the world in each of them to be respectively, using the nearest round numbers, 102 millions, 103 millions, and 100 millions of dollars. In 1875, the same authority† puts the product for the year at 101 millions of dollars.

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* Tooke & Newmarch's History of Prices, and the Economist newspaper, cited in Goschen's parliamentary report on the Depreciation of Silver.

† Goschen's parliamentary report, as before.

There is nothing in these figures which would lead us to suppose that the fall was much impeded; certainly it could not have changed to a rise. Again, while over 310 millions of pounds sterling were added to the stock of gold in the world during the fourteen years 1849–'62, during the thirteen subsequent years, up to the end of 1875, there was a further addition to this stock amounting to 263 millions of pounds sterling. We are justified, then, in concluding that a rise in the value of gold during the latter period was impossible.

While the fall of gold has been so slow and gradual as to be with difficulty detected, except when we regard its aggregate result after the lapse of a number of years, the depreciation of silver has been sudden and very great. It took place, as we have seen, in less than two years, and it amounted to 20 per cent. Its causes are easily discovered. Chiefly through the discovery and the rapid development of the silver-mines in the United States, there was a sudden and immense increase of the supply, and that was soon followed by an independent but considerable diminution of the demand. These two causes united created something like a panic, and several of the governments of Europe made haste to get rid, so far as was possible, of a commodity which, as it seemed, must rapidly decline in value, and to preserve their standard of value by demonetizing silver. Their action, of course, only enhanced the evil for others, against which it was intended to guard themselves. The stock of silver no longer needed for use as money in Germany, or for additional coinage by the states constituting the Latin Monetary Union, was thrown upon the market, where it operated to increase and accelerate the decline which had previously become inevitable.

The Comstock lode has been for our own times what Potosi was for the sixteenth century, though its effects have been developed much more rapidly.

The great increase in the supply of the precious metals from America, which took place during the latter half of the sixteenth century, was mainly owing to the discovery of the mines of Potosi, which were first systematically worked in 1545. Before that year, as we learn from Humboldt, the annual product of both the precious metals from America was only about 3 millions of dollars. Before 1600, Potosi had nearly quadrupled this amount, having raised it to 11 millions; and the consequence was, within a quarter of a century, that silver fell to about *one-third* of its former value. Before 1570, a quarter (eight bushels) of wheat of middle quality was sold in England, on an average of a long period of years, for about *two ounces* of pure silver; about 1600 (still taking an average of many years, so that the exceptionally good and exceptionally bad crops may offset each other) the price had advanced to a little over *six ounces*, a point from which it has not receded from that day to this.

Now pass over about three centuries, and we come to the effect produced by the Comstock lode in our own day. The product of the Nevada mines first became considerable in 1861, when the amount of silver raised, according to Dr. Linderman, the Director of the Mint, was about 2 millions of dollars. It rose rapidly till 1864, in which year the total product of silver in the United States, according to the same authority, was about 11 millions. In 1870 the annual product became 16 millions, and then rapidly bounded upward, till, in 1875, it had become 32 millions. During the last year, it was probably near 40 millions. Combining this product from the United States with that obtained from other sources throughout the world, we find that, up to 1861, the total annual yield of silver had been very steady for about ten years at a little over 40 millions of dollars, and that it rapidly increased from that date till 1875, in which year it became double its former amount, or almost exactly 80 millions.

In itself alone, this increase, though vast, might not seriously have affected the market for some years to come, since changes affecting the value of either of the precious metals are usually produced with great slowness, much time being required for equalizing prices throughout the world. During this intervening time, large quantities of the metal are, as it were, *in transitu*, or wandering about the world in search of the best market. But at about the same time, with the most rapid increase of supply, the demand for silver to be exported to British India suddenly fell off. During the four years 1862–'66, cotton was largely exported from India, and it was paid for by heavy remittances in silver, which is the money of that country. Within those four years, India absorbed silver to the enormous amount of 270 millions of dollars, this being the excess of the imports over the exports of that metal. Of course, when American cotton came again into the market after the close of the war, the price of India cotton rapidly fell off; it was no longer exported in large quantities, and the drain of silver for its purchase ceased. But another cause then came into operation, which prevented this drain from being at once and entirely checked. English capital was needed in large amounts to aid the construction of Indian railways, canals, and other costly public works; and the remittances on this account kept up the excess of the imports of silver over the exports, for another period of four years, to the average amount of 35 millions of dollars annually. At the end of this second period, the construction of these works practically came to an end, and the drain of silver, so far as this cause was concerned, not only ceased, but was turned the other way. India was then, and still is, heavily in debt to England for these supplies of capital; and the remittances home for interest and dividends became so large that India had but little to receive in merchandise or silver. The effect was, in 1870–'71, that the demand for silver to be sent to India suddenly fell off to less than 5 millions of dollars; and though it partially recovered the next year, the average for the last four years, ending in 1875, has been only about 10 millions annually, against an average of 67 millions a year during the four years of the American war, and of 35 millions a year for the four years following the close of that war. As it is improbable that the debt of India to England will be sensibly diminished for many years to come, it cannot be expected that the drain of silver to the East will be resumed to anything like its former extent within the life-time of the present generation.

The general result is, that, within the last fifteen years, the Comstock lode has added to the world's annual supply of silver about 40 millions of dollars, and the demand for that metal, to be exported to India, has fallen off, on an average, almost precisely to the same extent. No wonder, then, that the depreciation of silver should have been as sudden and great as that which we have witnessed, or that the principal states of Europe should have made haste to get rid, as far as possible, of their large stocks of this metal, and to substitute gold for silver as their standard of value. In the opinion of the undersigned, it will be wise for the United States, as far as may be, to follow their example.

England has had no occasion to change her action or her policy. Sixty years ago she adopted gold as her only standard of value, and demonetized silver, which has ever since been used in that country solely for purposes of small change, and is legal tender to the amount only of forty shillings. The quantity of silver in circulation being strictly limited, and being intentionally overvalued from the outset about 6 per cent., any depreciation of its value in the market does not at all impair its usefulness as subsidiary currency. Foreign silver coins cannot enter into circulation, but, if introduced into the country, can only be sold by weight at their bullion value. The consequence is, that English gold coins are now more generally received at their full value in all the markets of the world than any other form of money, and are a generally recognized medium for the settlement of international balances.

In order to secure the advantages of this English system, and to avoid the heavy loss which seemed impending over her currency through the depreciation of silver, Germany took the first step toward the abandonment of her silver standard by a law passed in December, 1871.

The Mark was then established as the unit of value, and the gold coins to be issued of the denominations of twenty and ten Marks were made legal tender. The value of the twenty-mark piece being made only fivepence less than that of the English sovereign, and threepence less than that of twenty-five francs, the new coins became easily interchangeable with the gold currency both of France and England. Power was also given for withdrawing silver coins, and the coinage of large silver pieces was stopped. The next step was taken in July, 1873, by a law which caused this imperial gold currency to take the place of the various currencies previously in use in the separate states of Germany, and established a subsidiary silver coinage, issued at a little more than 11 per cent. below its nominal value, and made legal tender to an amount not exceeding twenty Marks; but to avoid any inconvenience which might arise from too large an issue of these subsidiary silver coins, they were made receivable by the imperial and state treasuries up to any amount. The old silver coins were but slowly withdrawn, the one-thaler piece being continued in use at least up to July last. All bank-notes were withdrawn which were not made payable in imperial currency, and none can remain in circulation, or be issued in future, of a lower denomination than one hundred Marks, or about five pounds sterling. This was an important feature of the law, as bank-notes had previously been issued of as low a denomination as one thaler, and the withdrawal of all of them *below* five pounds must greatly increase the use of coin in small transactions. Under these laws, up to June last, new gold coins had been struck to the amount of 70 millions of pounds sterling. Of the old silver withdrawn, and not replaced by the new silver coinage, up to the 20th of April last, sales had been made to the extent only of about 6 millions sterling, which is too small an amount to have had much direct influence on the depreciation of silver before that date. It is probable, however, that a much larger quantity remains to be melted down and sold, though even an approximate calculation of its amount is stated by the German authorities themselves to be impossible.

Most of the other countries of Europe, excepting those which have in use a depreciated paper currency, have imitated the example thus set through preventing the further coinage of silver except for purposes of small change, and thus limiting the amount of it in circulation. None have gone so far, however, in this respect as Germany, but they have only done enough to prevent the influx of the now cheapened silver from driving gold out of circulation, and thereby depreciating their standard of value. Denmark, Norway, and Sweden virtually adopted the gold standard in 1872–'73, and have since largely imported gold, and have sold silver amounting to over 10 millions of dollars. Holland for some time pursued a vacillating policy, though attempts to alter her laws respecting coinage were made as early as October, 1872. But at last, in

June, 1875, her parliament passed an act prohibiting the coinage of silver indefinitely, and allowing the coinage of gold. Under this law, a gold 10-florin piece has been struck, and during the next nine months, 56 millions of florins in gold were issued, and have taken the place of an equivalent amount of silver, which has been discharged from circulation. France and the other states (Belgium, Switzerland, Italy, and Greece) constituting the Latin Monetary Union, have adopted an expectant policy, merely restricting within narrow limits the further coinage of silver, though the French minister of finance recently proposed a law authorizing the government to prohibit entirely the issue of any more silver 5-franc pieces. France, which had previously been almost drained of silver, first through purchasing cotton from India during the American war, and next by the payment of the German indemnity, has replenished her stock of that metal through the natural laws of trade, without any special legislation, but merely by contracting her paper currency, which for a time took the place of the exported silver money. She is probably deterred from adopting exclusively a gold standard, through her apprehension of the effect which would be produced in lowering the price of silver by throwing her large stock of it upon the market, in which case the cost of filling up the circulation with gold would be very considerable.

As already remarked, this action of the European governments in partially discarding silver from circulation as money has tended in two ways to increase the depreciation in value of that metal; first, by throwing large quantities of it upon the already burdened bullion-market, and secondly, by narrowing the field for its employment, and thereby lessening the demand. But to suppose that its depression in price *originated* in their action on the currency, and is entirely attributable to the measures which they adopted, would be to invert the relation of cause and effect. Rather its previous fall in value, and apprehended farther decline, caused them suddenly to demonetize it, as otherwise their general and nearly simultaneous action in regard to it would have been arbitrary and motiveless. There is no conceivable reason why they should all, within a brief period, have made haste to get rid of silver, if it had not appeared to them to be rapidly sinking in value while on their hands.

We have next to consider whether the causes which have produced the recent changes in the relative value of gold and silver are "permanent or otherwise." The question herein indicated does not admit at present of a determinate answer. We may form a somewhat loose estimate of the probabilities affecting the immediate future, perhaps for the next six or eight years; but if we attempt to look farther, or to arrive at more definite results, events as unexpected and as vast in their influence as the gold discoveries in California and Australia, or the finding of silver-ore in the Comstock lode, may falsify all our calculations. Of all human industries, mining the precious metals is the most precarious and uncertain. Legislation which is to affect interests and industries so large and complicated as those which depend upon the state of the currency in the United States, and upon the preservation of the standard of value, cannot be safely based upon vague estimates, or upon the interested statements and valuations made by large holders of stock in silver-mines; but explorations recently made upon the spot by the Director of the United States Mint, by Prof. R. E. Rogers, and other eminent geologists and mineralogists, and by mining engineers, leave little doubt that the quantity of silver-ore already partially exposed to view and measurement in the Comstock lode is enough to keep up the average product of that metal at least to its present amount for some years to come. It is not probable, then, that the supply will soon fall off, and there are no indications that the demand for the employment of silver, either in the arts, for monetary purposes, or for exportation to the East, will again become as extensive within the next five years as it was five years ago. On the contrary, the evidence goes to show that electroplated forks, spoons, and ornaments are already to some extent taking the place of the corresponding articles, far more costly, which contain a larger proportion of pure silver. No one expects that England, Germany, Denmark, Sweden, and Norway will soon reverse what is now their established policy, by again bringing silver into circulation as money, except for the very limited purposes of a subsidiary currency; and if not, then all these countries, excepting England, must continue for some time to be sellers rather than buyers of this metal. Moreover, the facts already mentioned make it highly probable that France, Holland, and Belgium* may soon adopt entirely the monetary policy of Germany, as they have already adopted it to some extent; and neither British India nor China seems likely soon to have again so large an excess of exports over imports as will enable either of them once more to exercise its extraordinary power of absorbing silver currency. There may be some farther reaction from the sort of panic in the market which recently depressed the price of standard silver to less than 50*d.* per ounce; but the fluctuations of value in the markets of the world caused by speculative movements or panics are of short duration and very limited extent. Silver may not again fall as low as it was in July, 1876; but it would be unreasonable to expect that it will soon recover and permanently maintain the price which it commanded in 1870.

The next subject of inquiry referred to this Commission concerns the policy of a "restoration of the double standard in this country, and, if restored, what the legal relation between the two metals, silver and gold, should be."

As the value of any commodity whatever depends primarily upon its cost of production, which is constantly varying, and secondarily upon its supply and demand, which are also extremely variable, as is shown by the incessant fluctuations of market-prices, it is obvious that there cannot be an *absolute* standard of value. Such a standard means something fixed and unchangeable, by their relation to which all other valuables may be measured. Now, there is no such commodity known; everything varies in value from one week to another, both from intrinsic causes peculiar to itself, such as its inherent difficulty of attainment, and from extrinsic causes affecting those agents, labor and capital, by which alone this difficulty can be overcome. The best that can be done is to select an approximate standard, that is, some one commodity which seems more stable than any other, and establish that by law as *the* standard by which the values of all other commodities are to be measured. Legislation is competent to do this, and practically has done it both in England and Germany, by establishing a certain number of grains of pure gold, coined either into a sovereign or a mark, and declaring that this shall be the common measure of value. But legislation is not competent to select *two* such commodities, and to declare that they shall *both* be the standard or common measure; or in other words, that there shall be a *double* standard. To attempt to do so is as absurd as it would be to declare by law that two clocks should both be the standard for measuring time, though, as everybody knows, no two clocks can be made which shall keep perfect time with each other.

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* According to the latest accounts, Belgium has done so already.

This theoretical view of the matter is amply confirmed by experience. Every attempt to establish the so-called "double standard" has been a failure. The first step toward causing any commodity to become a standard of value is to make it a legal tender for the payment of debts. But though the law may declare that either of two commodities shall be legal tender, only one of them, and that the cheaper one, is actually adopted as a medium of payment. If gold and silver be the two commodities chosen, and the legal relation between them be made to conform to the ratio of their market-prices at the time of the enactment, the fluctuations of the market will speedily change that ratio; and then the overvalued one speedily pushes the other out of circulation, and becomes itself the sole standard of value. It appears from the table already referred to, showing the monthly fluctuations in London of the gold-price of standard silver per ounce, that this price remained unaltered for as long a period as four months only once in forty-three years. Usually it varied every month, and but seldom remained fixed for two successive months. But any such departure of the market-price from the relative value of the two metals as established by law must cause that one which is overvalued, or of which the nominal exceeds the real value, to displace the other and take the whole circulation to itself. Always the bad money pushes out the good, as every one will adopt the easiest and cheapest means of paying his debts.

Thus France attempted, as early as 1803, to establish a double standard, and fixed by law the relative value of the two metals at 1 to 15.5. This ratio made the legal price of pure silver to be 28.64 grains of pure gold per ounce. But for over forty years the market-price of silver did not on an average exceed 28.25 grains of pure gold per ounce, so that the law overvalued it more than one per cent. To this extent, then, in France, silver was worth more as coin than as bullion, while gold was worth more as bullion than as coin. There was a profit of about one per cent. in carrying silver to the mint to be coined, and in melting up or exporting gold. Of course, silver flowed into France and filled up the circulation, while gold coins disappeared, or could be obtained only at a premium. In those times, when one was paid even so small a sum as 1,000 francs, he received his bulky and heavy money in a canvas bag, and had to hire a porter or a cab to convey it home. During the six years before 1852, the excess of the imports of silver into France over the exports was more than 28 millions sterling.

The discoveries of gold in California and Australia about 1850 reversed this state of things, as it was foreseen that gold must fall in relative value. Hence the market-price of silver rose above its mint valuation, and consequently the amount of gold presented for coinage in France became immense, and there was a drain of silver, vast quantities of which were melted down and shipped to India. The inconvenience which resulted from the want of small change had to be met by reducing the small coinage to the state of a subsidiary or token-currency, all pieces of two francs and under being much overvalued, so that they could not be exported or melted up without considerable loss. But the silver five-franc piece was nominally retained at its old valuation, and to fill the gap caused by its practical disappearance, gold five-franc pieces were coined to a large amount. Like our own gold one-dollar coins, however, these were found to be inconveniently small, and the coinage of them ceased even before the recent depreciation of silver brought the silver five-franc pieces again into circulation. During the six years, beginning with 1852, the excess of the exports of silver from France over the imports was more than 45 millions sterling.

Hence it appears that the French attempt to establish a double standard has been a total failure. France had silver for her only standard from 1803 till about 1850, and gold for her only standard ever since. Even now, since the recent great depreciation of silver, restricting the coinage of that metal within very narrow limits is a virtual adherence to the single standard of gold. The corresponding attempt to establish a double standard in the United States resulted in a similar experience of loss, inconvenience, and failure.

A law of Congress passed in 1792 established the United States Mint, and so regulated the coinage that both 24.75 grains of pure gold and 371.25 grains of pure silver were made legal tender for a dollar. This was an attempt to establish the double standard on the ratio of 1 to 15, which was probably the actual ratio of the market-prices of the two metals at that epoch. But silver immediately began to decline in price, and before 1800 it had reached the ratio of 15.42; while in 1803, as we have seen, even the French ratio of 15.5 had become too small. Of course, the overvalued silver filled up the circulation almost entirely; the whole coinage of gold for forty years was less than twelve millions of dollars; and this little was for the most part either preserved as a curiosity, or melted up and exported. A gold coin was seldom seen, and silver was virtually the only standard. This was not the worst. As the silver dollar had been made to conform almost precisely in weight and fineness to the Spanish milled dollar, Spanish quarters, eighths, and sixteenths, usually much debased by abrasion and clipping, poured into the country through our trade with the Spanish West Indies and South America, and soon formed almost our whole fractional currency. A small Spanish coin called a *pistareen*, so much worn as hardly to be worth 17, passed current for 20 cents. Vainly did the United States Mint issue American fractional coins of full weight and value, as these were soon melted up, and the bullion sold at a high profit for the worn Spanish coins which were equally current. Never was there a better illustration of the principle that bad money invariably displaces the good.

The law of 1834 remedied these evils by actually lowering the standard more than 6 per cent., and thereby establishing the relative value of the two metals at 1 to 16. Instead of 24.75, only 23.2 grains of pure gold were coined into a dollar, and thereby the par of exchange with England, which had been about $4.56, was raised to $4.87, for the pound sterling. Moreover, as by the ratio thus established silver was undervalued about 3 per cent., gold began to be issued in large quantities and came into general use, while silver pieces of the denomination of $1 were almost entirely thrown out of circulation, and the silver fractions of a dollar were kept in use only through the necessity of having some small change, and because, being much handled, they soon lost a portion of their weight by abrasion. The nuisance of the much worn Spanish coins was gradually abated by a general refusal to accept them at more than four-fifths of their nominal value. Practically, then, the attempt to establish a double standard had resulted in lowering the whole standard more than 6 per cent., and in establishing first silver, and then gold, as the whole measure of value.

In less than twenty years, the fluctuations of price in the market again created a necessity of tinkering the so-called "double-standard" currency. Soon after 1850, silver rose so much in price that even the smaller silver coins began to be melted up and sold as bullion. It became difficult to effect small purchases, or to obtain "change" for a dollar. Congress had now to undo what it had done in 1834. But its action was reversed, not by restoring the gold dollar to its former full weight and value, but by diminishing the quantity of silver which represented a dollar just about as much as it had lessened the quantity of gold in the dollar nineteen years before. The law of 1853 virtually surrendered the double standard, and made gold coin the only available legal tender for any debt over five dollars; for though the former one-dollar piece, containing 371.25 grains of pure silver, was not expressly demonetized, it had gone out of use, and practically remained out of use, in the domestic currency, because its value as bullion had come to exceed by about three per cent. its value as coin. But the silver fractional denominations, from half a dollar downward, were reduced to the state of a subsidiary or token currency, by so far diminishing their weight that a dollar's worth of them contained only 345.6 grains of pure silver, and by making them legal tender only for an amount not exceeding five dollars.

Thus gold was maintained as the single available standard for nine years longer, when, in 1862, the issue of an inconvertible paper currency, and making it legal tender, practically abolished every standard of value, and introduced the state of uncertainty, of wild fluctuations of prices, and consequent reckless speculation from the evil effects of which the country has not recovered up to the present day. In 1873, however, probably as a precaution against the great depreciation of silver which was even then foreseen, Congress took the last step toward the legal establishment of the single gold standard by demonetizing silver altogether, making all our silver coins legal tender only for an amount not exceeding five dollars. The gain which would accrue from manufacturing silver bullion into coins at a nominal value largely exceeding its cost was constituted a special fund for making good "the wastage;" it might properly be used to meet the heavy loss to which a silver currency is always subject from abrasion and clipping.

In the opinion of the undersigned, it is expedient to take one more step toward assimilating our system of metallic currency to that of England and the commercial world generally. By diminishing the quantity of pure gold in the dollar only three-fifths of one grain, or considerably less than half of what the law of 1834 subtracted from it without producing injury or complaint, our American half-eagle or five-dollar piece would become almost the exact equivalent of one pound sterling, and would differ only by a very small fraction from the value of twenty-five (gold) francs in France and the other States of the Latin Monetary Union, and from twenty (gold) marks in Germany. Already the English sovereign or one pound sterling is a recognized portion of the actual currency of such countries as Portugal, Brazil, and Egypt, and is practically current at its full value in every civilized country. Austria has recently coined and issued gold four-florin and eight-florin pieces, which, as practical equivalents respectively of the French ten-franc and twenty-franc coins, are easily expressed as definite portions of the pound sterling. Hence the slight change here recommended would be attended with the following important advantages:

1. It would be a long step toward establishing one monetary unit, denomination of account, and standard of value for the whole commercial world.

2. It would greatly facilitate the computation and settlement of international balances, accounts, and exchanges.

3. It would be the strongest possible safeguard for the future stability of the standard of value, as all nations would be interested in its preservation, and it could not be effectively altered without their unanimous consent.

4. In making remittances to other countries, it would no longer be necessary to melt the coins and have the bullion recoined at considerable charge in a foreign mint. The Government would no longer be put to the heavy expense of coining and recoining the same bullion, which had been first sent abroad, and then returned, through fluctuations in the balance of trade.

5. As American gold coins would be equally current everywhere with English sovereigns, New York would share at least one of the advantages which have made London the banking-house and commercial centre of the civilized world.

6. In the language of Professor Jevons, "a world-wide gold currency of unimpeachable fidelity and excellence would be obtained" alike from British, French, German, and American mints.

7. It would much facilitate our return to specie payments, the present premium on gold, 5½, being reduced immediately to about 3 per cent.

Justice, however, requires that all debts and contracts expressly made payable in gold, and outstanding on the date of the law authorizing this change in the coinage, should be discharged only by tender of dollars each containing 23.2 grains of pure gold, or by their equivalent.

After what now has been said, it is hardly necessary to consider the third subject proposed by Congress to this Commission, namely, "the policy of continuing legal-tender notes concurrently with the metallic standards." As it has been proved both by theory and experience that a *double* standard is an illusion and a failure, every attempt to establish it having led to frequent changes of legislation, and to great inconvenience and uncertainty in commercial affairs, any project for creating a *triple* standard ought to be summarily rejected as impracticable and absurd. The law may say that either a gold dollar, a silver dollar, or a paper dollar shall be indiscriminately *legal* tender; but the only *actual* tender ever made for the payment of a debt will be that one which, at the time, is the cheapest of the three. Hence the most effectual means of rapidly debasing the standard, that is, of depreciating the value of a dollar, will be to authorize any one to cancel debts outstanding against him by proffering in payment that one out of three different kinds of dollars which happens at the moment to be of the smallest value, especially when, as during the last year, the three are rapidly and largely changing their relative values. Only last July, the so-called "trade-dollar," the heaviest and most valuable one ever coined, was worth about .86, and the "greenback" paper dollar about .89, of a gold dollar. Five months later these proportions were reversed; the trade-dollar had risen in value to .94½, and the greenback to .92½, in gold. What sort of a *standard* would they have been, either separately or together, when they are liable to such fluctuations both in their relative and absolute values in less than six months? As there was no apparent change in the average price of commodities in general between July and December, 1876, we may be sure that the value of the gold dollar during that interval remained without alteration. Yet, under the attempt to create a triple standard, it is certain that the gold dollar would have been the only one which, during those five months, could not have come into use.

Whatever, then, might be the *intention* of Congress in attempting to create a double or triple standard, it is certain that the actual consequence of such attempt must be to exclude gold altogether, and to make either silver or the legal-tender note the only measure of value, and the only medium for the payment of debts. We have, therefore, merely to consider whether it is expedient and just to establish either of these two forms of money, in preference to gold, as the sole standard.

Money, properly so called, has two perfectly distinct functions to perform. It must be capable of use both as a standard of value and as a medium of exchange. It is obvious that the former of these functions is by far the more important. As to the latter, almost any commodity, even any ticket of transfer or token of debt, though without any intrinsic value, may be made to serve perfectly well as a medium of exchange, the question which of them is to be preferred for this purpose being determined solely by considering which is the most convenient. Silver, copper, nickel, bank-checks, railroad-tickets, postage-stamps, accounts-current or offsets of sales against purchases, and the like, may serve as media to facilitate the transfer of those commodities which are the only real objects of barter and sale. What is called a subsidiary or token currency, whether it be silver, copper, or nickel, is of this nature, the law affixing a definite limit both to the amount of it in use, and to the extent to which it shall be a legal tender, and also giving it a conventional, often differing from its intrinsic, relation to the real measure of value.

Far otherwise is it with the other function of money, that of serving as a standard of value, as on the proper execution of this office some of the most momentous interests of the whole community are entirely dependent. The very life of trade, and of confidence between man and man, depends on the due performance of contracts, on the successful maintenance of a system of credits, and on the anticipation of what will be the relative value of money and commodities at some future day. Very few mercantile transactions are really completed at the time when the bargains are first made, or when the commodities affected first change hands. Nearly all of them, either directly, or in their necessary and intended consequences, extend into a more or less remote future. The trader buys only in order to sell again, it may be the next week, the next month, or the next year. In every commercial community, far the larger portion of the sales which are effected are made on credit; that is, on promises of payment at some future day. And the debt thus contracted, through the agency of banks and other financial instruments, becomes itself an object of barter and sale, which are again dependent on trust in the future. Even in the case of cash-sales of commodities for speedy consumption, the purchaser's choice of the time and place for the transaction usually depends on his estimate of what prices are, or will be, elsewhere or on some other day. All such bargains, expectations, and promises must be expressed, and, if necessary, registered, in the common denomination of account—in francs, pounds sterling, or dollars; and any uncertainty as to the future value of this denomination of account must discourage individuals from engaging in the transaction, or, if not foreseen, must work hardship and injustice to them in the result. And these evils may all be caused, not only by any actual alteration of the standard within the period of time belonging to the transaction or the contract, but by any reasonable grounds of fear that within that time it *may* fluctuate in value. Any depreciation of the currency, if foreseen a few weeks before its occurrence, may be so far anticipated and exaggerated in its effects upon the market, that a very considerable rise of prices may take place some time *before* the currency is depreciated at all; and then, owing to the reaction of disappointed hopes and fears, the real depreciation, when it comes, may be contemporaneous with a considerable fall in prices. Trade thus becomes a lottery, and legitimate enterprises in commerce and manufactures must either be abandoned altogether, or kept up under a heavy cost of insurance against the uncertainty of the returns. The enhancement of prices produced by such insurance takes place without any of that compensation to the consumers, embracing the whole laboring class in the community, which arises from a corresponding increase in their income or wages.

In the opinion of the undersigned, to adopt silver for the standard dollar, would be a greater discouragement to manufactures and trade, and would do more harm to all the great industrial interests of the country, than even the continuance of the present wretched system of an inconvertible paper currency. Not only during the last year has silver undergone greater and more rapid fluctuations in price than paper, but the causes of its fluctuation are more difficult to be discovered, and less controllable, because wholly out of reach by legislation. By a very moderate and gradual contraction of the legal-tender currency, it is certain that Congress can prevent the paper dollar from sinking below its present value, and, by a few other well-considered measures, can steadily raise its value to par without spreading alarm, or creating any disturbance in the markets, or perilling any interest but those of the stock-jobbers, even before the time now fixed by law for the resumption of specie payments. But in view of recent experience, who can tell what the price of silver will be six months hence, or what legislative enactment can increase or diminish that price a single penny? As well might a legislator attempt by taking thought to add one cubit to his stature. Yet the only apparent motive for urging the adoption of a silver standard in the United States, at the very time when all Europe seems to be on the point of discarding it, is the vain expectation that an act of Congress may have the effect, in the stock-jobbers' phrase, of *bulling* the price of silver throughout the markets of the world. Granted that such an act might create a market for the silver which still remains to be sold by Germany and other European countries, it certainly could not restrict the productiveness of the mines in the Comstock lode, or restore to British India and China their former power of absorbing the surplus silver of the civilized portions of the globe. It would not be becoming for the dignity, as it certainly would be prejudicial to the interests, of the United States to engage in an operation equivalent to stock-jobbing, by making heavy purchases on a falling market of a commodity generally discredited elsewhere, in the idle hope of raising and controlling its price. The benefits of such an operation, if any, would be reaped only by the stockholders in silver mines, while the inconvenience and loss would be sustained by the people.

There are special reasons why silver is less eligible than gold for the chief place in a metallic currency. Its weight and bulk are too great in proportion to its value, so that it is very inconvenient for use in large transactions, and for the settlement of international balances. Its proper place is a subordinate one, being well fitted for small retail purchases and adjusting the fractional portions of accounts. And this place, as a subsidiary or token currency, seems to be now determinately marked out for it throughout Europe. We learn from the Director of the United States Mint, that one million of dollars in gold coins weighs 1 ton, 16 hundred-weight, 86 pounds; while the same value in "trade dollars" amounts to 30 tons, and in subsidiary silver coins to a little over 27 tons, 11 hundred-weight. Any one who was in France about 1840, when silver was virtually the only standard, and no bank-bills were in use of a less denomination than one hundred francs, will remember how burdensome and inconvenient this form of money seemed.

Another and more serious objection to the use of silver currency is its liability to considerable loss of weight and value by abrasion and clipping. Gold coins are but little exposed to deterioration from these causes. Having considerable value in small bulk, they are closely scrutinized when offered in payment, and if light in weight are rejected, so that worn and clipped coins, so to speak, never get a foothold in the currency. But silver pieces, especially the fractions of a dollar, because their value is comparatively trifling, are not closely examined, and so still pass current, though their original value has been much impaired.

By a careful and extensive series of experiments, weighing a large number of (gold) sovereigns taken at random from those which had been a long or short time in circulation, Professor Jevons ascertained that the loss by abrasion on each coin was almost always exactly proportional to the number of years it had been in use. He was thus enabled further to ascertain, that the average annual loss of weight by each sovereign was forty-three thousandths of one grain. In twenty-six years of use, therefore, it will have lost by abrasion about one per cent. of its value. In the same manner, he found the average annual wear of the *half*-sovereign to be sixty-nine thousandths of a grain, or more than half as much again as that of a whole sovereign. The smaller coin, therefore, loses by friction one per cent. of its value in about sixteen and a quarter years, this greater loss being attributable to its exposing more surface in proportion to its weight, and to its being more rapidly handled in purchases at retail.

We do not know that any equally careful experiments have been made to ascertain how much silver coins lose annually by abrasion, but a tolerably good estimate may be formed by comparison of the two cases. Other things being equal, the loss will be proportioned to the amount of surface exposed to friction, and also to the frequency and carelessness with which the coins are handled. Now, a shilling exposes to wear about as much surface as a sovereign, and therefore, from this cause alone, a pound sterling in silver shillings will lose annually by abrasion twenty times as much as the same value in one gold piece. Moreover, in the numberless petty transactions of every-day life, shillings are circulated far more rapidly and carelessly than sovereigns, and their consequent loss by friction must thus be much increased. Then the estimate formed by the best authorities seems a reasonable one: that the annual loss on silver coins by abrasion is at least 1 per cent.

Hence it appears that the cost of repairs, the difficulty of maintaining the currency in full weight and good condition, is at least twenty-six times as great for silver coins as for gold ones. If the government neglects its duty of making good at considerable expense this annual deterioration by wear, the state of a silver currency soon becomes deplorable. After some years of ordinary active use, the coins betray their loss of weight by their worn and defaced appearance, and the evil is increased and made universal by dishonest persons, who pick out from the circulation the pieces freshly issued from the mint, and others which happen to be less worn, and by punching or clipping reduce them to the average, or below the average, of debasement. Also, as the coins now pass perhaps for 10 per cent. more than they are worth, foreign silver coins of inferior weight are attracted from neighboring countries to a place where they are current for a higher value than they possess at home; and the task of expelling these intruders is by no means an easy one. Already, though our fractional silver currency has been but very recently restored to use, worn Canadian and Spanish "quarters" and punched American coins have begun to appear in circulation. If remedial measures are not adopted, our silver currency will soon be again in as bad condition as it was just before 1830, or as that of England before the recoinage of

1696, or as that of Germany before her abandonment of the silver standard in 1873.

The evil in question is not so considerable, and a remedy for it is not difficult to be had, if silver be restricted to its only proper monetary function, that of furnishing a subsidiary or token currency. No one is then obliged to receive the deteriorated coins except to the small amount for which they are legal tender; and as the whole quantity in circulation is not very great, and the Government have reaped a large profit by issuing it at a rate considerably above its intrinsic value, this profit may properly be made a fund for defraying the expense of constantly withdrawing the light coins and filling the vacuum with others of full weight fresh from the mint. In this way, England and France of late years have kept their subsidiary silver coins in perfectly good condition, the former country usually issuing new and perfect pieces each year to the amount of £3,000,000, yet without at all increasing the volume of this portion of the currency, because old and worn coins to the same amount are withdrawn.

But if silver is made legal tender for any amount whatever—and that is what the project of a double or triple standard means—gold will disappear from circulation, no fund will be available to defray the considerable cost of annual repairs, and both the United States Treasury and the country generally will be reduced to the condition in which British India is already placed, with heavy liabilities both abroad and at home, which are payable only in gold, but with taxes, wages, and dividends receivable in a metal which may again, as during the last year, lose 16 per cent. of its value within six months.

A few persons who do not understand the subject imagine, that if the mint and the Treasury be required, under the system of a double standard, freely to exchange gold dollars for silver ones at par, or the reverse, whenever such exchange is demanded, then neither metal could fall below the value of the other. Certainly it could not, within the limits of the country foolish enough to act thus, and during the few weeks which could elapse before its mint and treasury would be drained of their last gold dollar. For, suppose the price of silver should fall in the London market only 2 per cent. below its former value relative to gold; then any person, by shipping thence $980,000 worth of silver bullion, could receive for it here one million of gold dollars, and could repeat this operation indefinitely, or until stopped by the bankruptcy of our mint. A compulsory union of the dearer metal with the cheaper one could permanently establish an equality of value between them only if the unequal marriage were sanctioned by all the nations of the earth. But, as probably both England and Germany would at once forbid the banns, this project of M. Czernuschi is not likely to be soon carried into operation.

The undersigned sees no objection, however, to a considerable enlargement of the limits within which the subsidiary silver currency is now issued and made a legal tender, paper money being withdrawn to an extent equivalent to the enlarged issue thus made, as has been already done in the case of the silver fractions of a dollar, so that the aggregate volume of the currency shall not be increased. An important step would thus be taken toward a resumption of specie payments, and a reasonable concession would be made to those who desire a larger use of silver money. Dollars might be coined each containing 345.6 grains of pure silver, be made legal tender to an amount not exceeding twenty dollars, and be issued only in exchange for paper money, whether greenbacks or national-bank notes, of any denomination below five dollars, the notes thus received in exchange being immediately cancelled and destroyed. A burdensome redundancy of silver thus thrown into circulation might be prevented by making it receivable by the Treasury to any amount, in payment of all dues to the Government which are not by law made payable only in gold. These silver dollars would be a convenient and unexceptionable medium of exchange, and as they would not be a standard of value, they could not introduce any uncertainty about the just fulfilment of contracts. They could not be melted up or exported without loss, and as receivable by the Government to any amount, they could not become depreciated in the market. The amount of one-dollar and two-dollar notes now in circulation is about sixty-five millions of dollars. These would all be gradually withdrawn, and their place would be filled by silver coin in all retail transactions.

We come now to the last subject which this Commission is required to consider, namely, "the best means for facilitating the resumption of specie payments." In the opinion of the undersigned, the two measures already herein proposed would go far toward accomplishing such resumption without creating any disturbance in the markets, without any injurious shock of sudden transition, and without harming any class or interest that can rightfully claim to be protected by the Government. Each of these measures is a concession to one or the other of the only two parties who now appear to be hostile to such resumption. Reducing the quantity of pure gold in the dollar to 22.6 grains, through bringing it so much nearer the present value of the legal-tender (greenback) note, favors those of the indebted class who fear that resumption will make it more difficult for them to pay their debts. Substituting silver for all notes below the denomination of five dollars will be as large a measure of protection to what may be called "the silver interest" as can reasonably be asked from Congress. Should these two recommendations be adopted, it is reasonable to believe that the premium on gold would continue to decline as fast, and also as uniformly and innocuously, as it has done since March 9, 1876; and since its fall within ten months after that date from 15 to 5½ per cent., so far from creating any injury or disturbance, has been attended with a considerable growth of confidence and revival of trade, there are no grounds for apprehending any evil consequences through its further decline from 3 per cent. to zero. The paper dollar having thus risen to its par value, specie payments might safely be resumed some time before the period now fixed by law, as the amount of surplus gold already in the Treasury would be quite sufficient to meet the very moderate demands which would then be made upon it to redeem its notes.

In order to make sure of this further decline, however, and also to diminish what would still be the excessive volume of paper currency, the Secretary of the Treasury should be enabled and required gradually to lessen the amount of it in circulation. He is already authorized to sell United States bonds for gold as a means of providing for resumption, and also to sell the gold so obtained and receive legal-tender notes in payment. These notes he should be required to destroy, to the amount of three millions of dollars a month, none others being issued in their place. This would only be to continue, under the authority of law, the same rate of contraction which has spontaneously taken place during the last twenty-two months. These preliminary measures being adopted, Congress might safely and justly repeal all laws which "make anything but gold and silver coin a tender in payment of debts."

It is evident, then, that the accumulation of more gold in the Treasury is not a necessary means or preliminary for the resumption of specie payments. The legal-tender notes originally issued in payment of debts due *from* the United States, are redeemed and discharged when received as an equivalent for the same amount of debts due *to* the United States, none others being issued in their place. In fact, the process of redemption is constantly going on through the receipts from internal taxation and other sources; and this process is made final, simply by not paying out again these notes or any others, and by making what provision may be necessary to discharge the ordinary obligations of the Treasury, either by imposing additional taxes or by the sale of bonds. During the last fiscal year, about one hundred and twenty-five millions of these notes were received as internal revenue and from the sale of the public lands; and if none others had been issued in their place, resumption would, before this time, have been complete, and accomplished, too, by a process so gradual and harmless that none but those who closely watch the financial operations of the Government would have been aware that anything unusual was going on.

What is to be feared from making silver an unlimited legal-tender is not so much a depreciation of the standard of value, as the recurrence of sudden and great fluctuations in the market-prices of commodities, and of reckless speculation in commerce, mining, and manufactures, which are properly attributable, as in the case of paper money, to having no standard at all. What we dread is not the *fall*, but the *fluctuation*, in value of the would-be standard, and the feeling of uncertainty thereby produced; and this dread is only confirmed and enhanced by the recovery in the market-price of silver, within the last six months, from about 47*d.* to 58½*d.* an ounce, being about all that it had lost during the earlier part of the year 1876. Against this uncertainty, and its depressing effect upon all legitimate enterprise, industry and trade, nothing can protect us. The discovery of more *bonanzas* in the Comstock Lode, the further demonetization of silver by France and Holland, or a still more unfavorable balance of trade in British India, may send the price of that metal down again during the next half year lower than ever. With such a contingency hanging over it, commerce does not start into full activity and industry is paralyzed.

Those who still fear that a resumption of gold payments would be prejudicial to our financial interests, and do wrong as well as harm to the indebted classes, ought to learn from the experience of the last three years, and especially from that of the year which has just ended, that their apprehensions are groundless. The war-prices, the wild speculations, and excessive personal expenditures, which had been created and fostered by the immense issues of paper money in 1864 and 1865, and maintained by the convulsive efforts of those who had been enormously enriched by these events, reached at length their inevitable issue, and came to an end all at once in the crises of September, 1873. More than ever before during the present century, rents and prices fell, real estate ceased to be marketable, merchants went into bankruptcy, railroads passed into the hands of receivers, manufactories stopped, the incomes of persons not in active business but living on their private means were cut off, and the laboring classes were thrown out of employment. Great as was the calamity, however, after the storm had cleared the air, a revival would probably have begun in less than a twelvemonth, as had been the case in all former commercial crises, had not the Secretary of the Treasury so far strained his authority beyond all law or precedent as to throw upon the market, without any express sanction by Congress, an additional issue of twenty-six millions of paper money, with the threat that it might be followed by eighteen millions more. Then, indeed, people did not know what to expect; confidence broke down entirely; capitalists preferred to allow their funds to remain idle, rather than to make loans which might be repaid in dollars not worth half as much as those which had been borrowed, and what might have been merely a temporary convulsion, followed by the glow of reviving health and strength, passed over into that general paralysis of trade and industry which we have witnessed during the last three years.

Experience has demonstrated that the cause of this prolonged evil, which has brought multitudes of industrious and deserving persons to the brink of penury and ruin, was not what the inflationists call a lack of money. When the calamity was at its height, as it was throughout 1875 and the early part of 1876, there was no lack, but rather a superabundance, of money, the banks and the capitalists having more than they knew what to do with. Hence they were eager to let it on undoubted security, such as Government stock, and *on call*, as the phrase is, so that there would be no time nor opportunity for its depreciation, at as low a rate as 3 or even as 2½ per cent. With a circulation then amounting to nearly seven hundred and forty millions of paper dollars, which at that time were worth about 87 cents apiece, and which, because commerce and industry were paralyzed, were freely offered on call at 3 per cent. interest, it would surely have been absurd to call for the issue of "more money" as a means of rescuing the country from its difficulties.

At length, especially during the latter half of the year 1876, the evil began to cure itself, and that, too, by means which clearly indicate that the undue inflation and consequent fluctuating value of the currency had been the sole original source and the aggravation of the difficulty. Spontaneously, without any aid from legislation, or any concert between individuals or the banks, the paper currency began to contract itself. Unable to make any profitable use of their funds, because credit was dead in the community, and the wings of enterprise were clipped, many of the banks voluntarily surrendered their circulation altogether or in part, and either retired from the business, or confined their operations to what are the only two proper functions of a banking institution, those of deposit and discount. They were thus relieved from some heavy taxes, and were able to withdraw their United States stock, deposited as security to redeem their circulation, and by selling this stock at the advanced prices which it commands in the market, because payable in gold only, to make greater gains than were possible from lending their own notes at three per cent. interest. Though the act of January 14, 1875, repealed all limits to the *increase* of national-bank circulation, and thereby invited a further inflation of the currency, it appears from the last report of the Comptroller of the Currency, that the total *decrease* of legal-tender notes and national-bank notes between January 14, 1875, and November 1, 1876, has been over forty-five millions of dollars. And this process of diminution is still going on, the amount of legal-tender notes on deposit with the Treasurer for the purpose of still further retiring bank-notes being, on November 1, 1876, nearly twenty-one millions, so that the aggregate amount of paper money voluntarily withdrawn from circulation in less than twenty-two months has been about sixty-six millions, or nine per cent. of the whole quantity in use.

And what has been the consequence of this spontaneous contraction of the paper currency? The paralysis of credit and industry is passing away, and commerce to a marked degree has begun to revive. A very favorable balance of trade has reduced the rates of exchange on England considerably below par, and gold has constantly flowed into the country to an unprecedented extent. According to the estimates of the Director of the Mint, the amount of coin and bullion in the United States on June 30, 1876, was over one hundred and eighty-one millions, of which about thirty millions were silver. As the imports of gold during the autumn of 1876 were immense, owing to the favorable balance of trade, and as the mines of both the precious metals during the same period were very productive,* there can be no doubt that the quantity of the precious metals in the country on January 1, 1877, was at least two hundred and twenty millions. In the opinion of the undersigned, that sum is a sufficient basis on which specie payments could be maintained without difficulty or disturbance, even if resumption should take place at a very early day. For the effect of such resumption would be to rescue this specie from its present semi-latent state, employed only in foreign trade and in certain limited transactions with the United States Treasury, and bring it once more into full use *as money*—as a constituent part of the active circulation of the country. So brought back, it would even more than fill the gap caused by the partial withdrawal of paper currency, and in this way, combined with its effect in still further restoring confidence, and putting more heart into trade and manufactures, the probable immediate effect of resumption would be to raise the prices of commodities generally, instead of depressing them, and thus actually to favor the indebted States, and, generally, the indebted classes of the people.

Turn the matter as we may, the chief cause of the evils under which for three years the country has suffered, has been impaired credit, and the want of trust in the future. It has been the absence of any fixed standard of value, and the uncertainty in the markets caused by the fear lest Congress should again inflate the paper currency. Who were the greatest losers by this deplorable state of things? Not the creditor class, surely; not the capitalists; not the owners of unencumbered houses and lands, and Government gold-paying stocks, and fully constructed and equipped railroads, which are still paying dividends, though at reduced rates. These have something to fall back upon; their incomes are diminished, it is true, and sometimes cut off altogether; but they can still subsist for a long time, even on their dead capital. But the indebted and industrious classes have no shelter behind which they can retire for a season. They are exposed at once to the whole violence of the storm. For them, the inevitable result of the withdrawal of credit, the consequent embarrassment of trade, and the crippling of every industrial enterprise, is privation of employment, hopeless insolvency, and ultimate ruin. No persons in the community would be so much benefited by the restoration of a fixed standard of value as the industrious and dependent classes. For them, the certainty that the dollar will be worth a month or a year hence precisely what it is worth to-day means regular employment, a fixed rate of wages, a stable market, moderate but certain gains, and the absence of all anxiety for the future.

The South and West, already largely indebted to the Eastern and Middle States, are still in urgent need of further advances of capital from the same source in order to develop still more their unrivaled opportunities, their boundless stores of latent wealth. The paralysis of business throughout the country is specially detrimental to them, as they have no reserves to fall back upon, no stores of capital already amassed, which they can afford to suffer to remain idle for a time, till the returning tide of confidence and enterprise shall again set the wheels of industry in motion. Nearly all their current gains from improvements already completed are absorbed in paying the interest on the mortgages and bonds which represent the advances previously made to them, being the price of most of the prosperity which they have hitherto enjoyed. Many of the people that are now clamoring for more inflation of the currency, think that the increase in the number of paper dollars, and the consequent inevitable depreciation of their value, will both make it easier for them to pay the interest on their debts already contracted, and so far revive speculative interest as once more to irrigate their fields with the inflow of capital from the East. But even a child might see that these two contemplated results are incompatible with each other. One who is already deeply in debt cannot pave the way for obtaining the additional loans that he needs by announcing of his own accord that he is in a state of spontaneous and chronic bankruptcy, that he will not at the utmost pay more than 93 cents on the dollar, and that he has taken steps to make sure that even this dividend shall rapidly be diminished, only leaving it uncertain whether it shall early or late be reduced to nothing, and the debt consequently be repudiated altogether. Capitalists must be singularly constituted who will grant fresh loans to debtors openly announcing such conditions.

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*According to Dr. Linderman, "the domestic production of gold and silver during the fiscal year (ending June 30, 1876) was about 85¼ million dollars, of which amount 46¾ millions were gold, and 38½ millions silver."

There is a grave question indeed whether the national honor is not even now tarnished by the mere fact that specie payments have not been already resumed. By the act of March, 1869, entitled "An act to strengthen the public credit," the faith of the United States was "solemnly pledged" "to make provision, *at the earliest practicable period*, for the redemption of the United States notes in coin." The amount of legal-tender notes outstanding on November 1, 1876, was $367,535,716. But it appears from the following table, for which I am indebted to the kindness of the Secretary of the Treasury, that, after discharging all the obligations of the United States already due which are payable only in gold, the Government sold at public auction, between July 1, 1869, and September 30, 1876, surplus gold to the amount of $389,705,144.68, on which it received a premium of $58,020,155.53. In view of the fact that the surplus gold thus disposed of exceeded by over 22 millions what was necessary to redeem all the legal-tender notes outstanding, how can it be said that Congress has kept its solemnly-pledged word that it would redeem those notes "at the earliest practicable period"? The paper money received from that sale of gold was not needed in order to provide for the other necessary expenditures of the Government; for it appears that, during the period in question, after defraying all the ordinary expenses, the Treasury paid off public debt not yet due to an amount exceeding 435 millions of dollars.

Amounts of surplus gold sold by the United States Treasury from July 1, 1866, to October 1, 1876, with the premiums received thereon.

Period.	Amount sold.	Premium received.	Average rate per cent. of premium.
From July 1, 1866, to June 30, 1867	$38, 337, 928 78	$14, 154, 843 55	37
From July 1, 1867, to June 30, 1868	54, 209, 653 79	21, 934, 986 54	41
From July 1, 1868, to June 30, 1869	32, 013, 258 45	12, 376, 289 38	39
From July 1, 1869, to June 30, 1870	65, 081, 516 50	15, 294, 137 37	24
From July 1, 1870, to June 30, 1871	72, 423, 042 03	8, 892, 839 95	11
From July 1, 1871, to June 30, 1872	77, 597, 495 70	9, 412, 637 65	12
From July 1, 1872, to June 30, 1873	76, 993, 246 54	11, 560, 530 89	15
From July 1, 1873, to June 30, 1874	38, 013, 974 80	5, 037, 665 22	13
From July 1, 1874, to June 30, 1875	33, 401, 526 42	3, 979, 279 69	12
From July 1, 1875, to June 30, 1876	25, 092, 251 44	3, 723, 545 80	15
From July 1, 1876, to September 30, 1876	1, 102, 111 25	119, 518 96	11
Totals*	514, 265, 985 70	106, 486, 275 00	21

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* Also, in May and August, 1876, there was a further sale of gold received under the Geneva award, amounting to $8,374,714.78, on which a premium was obtained of $1,014,222.85, or nearly 12 per cent.

Summing up, the following are presented as the conclusions of this report:

1. The great changes which have taken place during the last year in the relative value of the two precious metals are attributable almost entirely to fluctuations in the market-price of silver, since the prices of commodities generally, reckoned in gold, have been comparatively stable.

2. These fluctuations indicate a considerable fall in the value of silver, which has been produced by three causes: 1. By the great productiveness of the silver-mines in the Comstock lode, which within a few years have doubled the average annual product of that metal for the whole world; 2. By a great diminution, within the last five years, of the demand for silver to be exported to British India; 3. By the demonetization of silver, within the same period, by Germany, Denmark, Sweden, and Norway, and the limit put upon the coinage of it by Holland, France, and the other states of the Latin Monetary Union.

3. These fluctuations prove that silver has become entirely unfit for use as a standard of value; and this action of Germany and other European states shows that they have become aware of this unfitness, and have altered their systems of coinage and legal-tender accordingly.

4. The question whether the three causes here alluded to have *permanently* depreciated the value of silver is one which does not at present admit of a determinate answer. Vague estimates and uncertain theories afford no safe grounds for legislation.

5. The so-called double standard is an illusion and an impossibility. The prolonged attempts made both by France and the United States to establish such a standard have been complete failures, causing much confusion and inconvenience, necessitating frequent changes of legislation, and resulting only in the alternate establishment of one or the other precious metal as the sole standard.

6. Silver is further unfitted to be the principal medium of exchange, 1, through its considerable weight and bulk in proportion to its value, being thus inconvenient for use in large transactions and settling international balances; and, 2, through its constant liability to loss by abrasion and clipping, the corresponding loss in the case of gold being so small as to be almost imperceptible.

7. The proper place for silver in a monetary system is that of a sub-

sidiary or token currency which is considerably overvalued by law and made legal tender only within certain limits. These limits being indeterminate except by general considerations of expediency, there is no valid objection to so far widening them as considerably to increase the amount of silver now in circulation, paper money being withdrawn to an equivalent amount, and the silver coins being made legal tender for any sum not exceeding twenty dollars.

8. The proposed "policy of continuing legal-tender notes concurrently with the metallic standards" would be in the highest degree inexpedient and unjust, this paper-money system having been the chief cause of the paralysis of trade and industry under which the country has labored for the last three years, and Congress having, as far back as 1869, solemnly pledged the faith of the country for the resumption of specie payments at the earliest practicable moment.

9. Circumstances at the present time have made such resumption both practicable and easy within a very brief period, the paper currency having spontaneously contracted itself at the average rate of three millions a month during the last twenty-two months.

In order to complete this very desirable result, and to make our monetary system conform in all important respects to that of the most prosperous, and best-ordered commercial countries of Europe, the following measures are respectfully recommended for adoption by Congress:

1. That dollars be coined each containing 345.6 grains of pure silver, which shall be legal tender for any sum not exceeding twenty dollars, and shall be issued only in exchange for paper currency below the denomination of five dollars, and the one-dollar and two-dollar notes so received in exchange shall be immediately canceled and destroyed. These silver dollars, however, shall be receivable to any amount in payment of any dues to the Government, except for duties on imports. After January 1, 1878, notes below the denomination of five dollars shall not be paid out either by the Treasury or the banks, and shall not be legal-tender.

2. Gold shall in future be coined only at the rate of 22.6 grains of pure gold to the dollar, so that the half-eagle or five-dollar piece may be almost the exact equivalent of one pound sterling; and the gold so coined shall be legal tender to any amount: *Provided, however*, That all debts and contracts expressly made payable only in gold, and outstanding on the date of this enactment, shall be paid and discharged only by dollars each containing 23.2 grains of pure gold, or by their equivalent.

3. Out of the paper currency received by the Government in the collection of its internal revenue, a sum not exceeding three millions of dollars each month shall not be re-issued, but shall be canceled and destroyed; and any deficit which may thereby be created in the Treasury shall be supplied in the manner already authorized by law, namely, by the sale of any of the United States bonds which the Secretary of the Treasury is now empowered to issue.

All of which is respectfully submitted by

FRANCIS BOWEN.

I concur in foregoing report of Mr. Bowen.

R. L. GIBSON.

SPECIAL REPORTS OF THE SECRETARY OF U. S. MONETARY COMMISSION.

The secretary, George M. Weston, having been directed by the Commission to investigate and collate the facts, authorities, &c., relating to the special subjects named below, prepared the following papers:

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SPECIAL REPORTS.

ASIATIC TRADE AND THE FLOW OF SILVER TO THE EAST.—ENGLISH MISCONCEPTIONS.

Of current British writers known on this side of the Atlantic, Jevons alone seems to have an adequate idea of the importance and reliability in the future of the eastern demand for silver. Many leading British writers entirely misunderstand the causes which give rise to this demand, which is an essential element in fixing the value of silver, whether measured in gold or in general commodities. These mistakes of British economical authorities will be found to be remarkable both in character and persistency, and they undoubtedly constitute the principal origin of the delusion that the general tendency of silver is towards depreciation, which prevails largely in England, and which Seyd and other English advocates of the double standard do not wholly escape.

The most authentic exhibition of the errors current in London in recent years in respect to the general nature of the trade between Europe and Asia is to be found in the annual reviews of finance and commerce in the London Economist, the principal portions of which have been regularly reprinted in the journal of the London Statistical Society as possessing a high, recognized, and permanent value.

As respects the special case of India, it may safely be assumed that the current ideas of England are authentically expressed, not only in the London Economist, but in the report of the British Silver Commission of 1876, the chairman of which, Mr. Goschen, seems to be regarded in that country as one of its most eminent financiers, both in practical experience and in clearness and breadth of theoretical views, and in the resolutions of the governor and council of India, (September 22, 1876,) which cover the entire subject of the monetary relations of India with the world, and especially with Great Britain.

OPINIONS OF THE LONDON ECONOMIST.

REVIEW OF 1864, PRINTED MARCH 11, 1865.

In four years the imports from India and the Levant have certainly doubled in value These are countries of exceedingly backward civilization. Hitherto, the native cultivators have had few wants, and have been so ignorant of the real principles of trade as to regard gold and silver as precious beyond all other things, and as fit only to be buried in secret hoards, instead of being put away as rapidly as possible in exchange for articles of use and enjoyment. A trade, therefore, of imports from these countries, suddenly doubled in volume, necessarily implied the transmission of a large part of the price in specie and bullion; and so it actually happened. The average annual export of treasure to India and the Levant for the five years 1857–'61 was 13½ millions sterling; the average export of 1863–'64 was 23 millions.

A free and vigorous commerce is potent to arrive rapidly at a state of things in which trade, even with very backward countries, *becomes the barter of one set of commodities for another set of nearly equal exchangeable value.*

The probability seems to be that in 1865 the action of the eastern demand for bullion remittances will be on a much more restricted scale than in 1863–'64; and that the taste already excited in those countries for articles of English production will have laid the foundations of a commerce as regular as that with America or France.

The immense wealth poured into Bombay and Bengal during the last two years has apparently at last broken down most of the barriers to the reception by the natives of thoroughly European notions of commerce.

REVIEW OF 1865, PRINTED MARCH, 1866.

The great rise in the price of cotton led to large and urgent orders to India and elsewhere for further and early supplies, and such orders of necessity implied considerable remittance of treasure, and that treasure chiefly in the form of silver, to be purchased on the continent by means of gold sent there from this country.

The four countries or regions which have been most profoundly affected by the demand for cotton at high prices have been India, China, Egypt, and Brazil.

Year.	Merchandise imports from India, China, Brazil, and Egypt.	Merchandise exports to India, China, Brazil, and Egypt.
	Millions stg.	*Millions stg.*
1864	94.6	38.3
1863	83.6	32.7
1862	62.9	24.8
1861	42.1	29.1
1860	37.0	30.3

The peculiarity of these figures is the amazing increase they exhibit of nearly sixty millions sterling in the *imports* from India, China, Brazil, and Egypt against an increased export of no more than eight millions sterling. For five years we have been laying widely and deeply the foundations of a vast future trade with those fertile tropical countries. We found the people who inhabit them rude, ignorant, without enterprise and with few wants, but the golden (silver) shower which has descended so plentifully upon them since 1860 has already had some effect, and it is quite certain that the increase of eight millions in the export is only the beginning of a demand which will *presently reduce the trade to the sound condition of an exchange of merchandise representing values not very widely different.*

REVIEW OF 1866, PRINTED MARCH, 1867.

The large drain of gold and silver to Egypt, India, and the East, which has been in progress since 1861, chiefly in payment of cotton, came to an end in March and April last, (1866.) The total export from Europe was nine and a half millions, or one-third less than the export (fourteen millions) of 1865.

For five years the tide of the precious metals has run so strongly and constantly toward the East that the supplies from the gold countries have been absorbed for that destination as quickly as they appeared. *We shall now see a different state of things.*

REVIEW OE 1867, PRINTED MARCH, 1868.

The revival of the cotton cultivation in America has already reduced the export of gold and silver to India to a narrow compass. Instead of the enormous drain of twenty-four millions sterling in each of the years 1863 and 1864 and of fourteen millions in 1865, the exports fell to ten millions in 1866, and in 1867 to the comparatively small sum of three and a half millions.

A few years will enable us to judge of the effects on the Indian populations of the prodigious prosperity of the last five years. The railways will have effectually opened up new markets in the interior, and will have carried European goods where they never appeared before, and the improved means and wages of the cultivators will enable them to buy articles formerly beyond their reach. All these influences will powerfully tend to *make European exports to India more nearly balance than hitherto the European imports from it,* and will, therefore, reduce the trade to such an exchange of commodities as will require but small supplemental transmissions of specie. It is, indeed, conceivable that at no distant period the current of the metals might tend more strongly *from* India than *to* it.

REVIEW OF 1868, PRINTED IN 1869.

The Abyssinian war has led to a large increase in 1868 in the export of gold and silver to Egypt and the East. The total exports by English and French steamers were—

In 1867	£3,695,000
In 1868	10,075,000

Of this six and one-third millions of increase, nearly four millions is due to the Abyssinian war. The slightly increased exports to India have arisen from the revived demand for Indian cotton.

The effect of the cessation of the bullion drain to the East early in 1866 is strikingly shown in the rapid rise of the total bullion reserves of the Bank of England and the Bank of France.

* * * * * * *

In India, a system of sound paper currency has been established, which, in the course of twenty years, may, by remote possibility, lead to a real economy of coin in that country. At present, the bank-notes are less than ten millions sterling, probably not a thirtieth part of the circulation of the presidencies.

REVIEW OF 1869, PRINTED MARCH, 1870.

In 1869, there has been no Abyssinian war to swell the exports of gold and silver to Egypt and Bombay, but the figures are nevertheless not very different—say nine millions in 1869 against ten millions in 1868.

The peculiarity of the 1869 figures is the large increase in the *silver* and the falling off in the *gold* shipments.

During the ten years 1860–'69 the total export of gold and silver (chiefly the latter) from Europe to *China* has amounted to about twenty millions sterling. But this sum represents only about half the influx of the precious metals into China, inasmuch as the import into that country from California is believed to be nearly as large as the import from Europe.

The effect of the improved condition of India, the higher wages, and the cheaper modes of transit, has already extended the Indian markets for English goods, *and so set in action a train of causes likely to diminish permanently the drain of gold and silver to the East.*

REVIEW OF 1870, PRINTED MARCH, 1871.

The bullion trade with India has fallen into small proportions. In 1863 and 1864 the export of gold and silver to India and China was 24 millions sterling per annum; last year, 1870, it had fallen to 4⅓ millions, and a reflux from the East to Europe has actually been witnessed in mercantile calculations of exchange. *It is not unlikely that this reflux current will expand and continue.* During the twenty years 1851–'70, Europe has sent to the East 51 millions sterling of gold and 176 millions sterling of silver—together 227 millions, or an average export of (say) 11 millions per annum. The annual production of gold from the new sources, California and Australia, has been about 15 millions sterling. The eastern demand has amounted, therefore, to over 70 per cent. of the new production. The Australian and Californian supplies seem to be gradually but steadily diminishing, and there is an apparent probability that the effect of the development of India may be *to render the hoards of treasure possessed by the nations available for western purposes, and available at the very time when they are needed.* This result will be assisted by the steady progress of the bank-note circulation of India. The authorities have quite recently satisfied themselves that the bank-notes may be pushed more vigorously into circulation, and that the minimum denomination may be reduced from ten to five rupees.

REVIEW OF 1871, PRINTED MARCH, 1872.

We give our usual table of the movement of gold and silver to the East. There has been some revival in 1871 of these exports, and the total reaches 6¼ millions against 4⅓ millions in 1870.

The higher prices of cotton will lead to augmented remittances to India.

REVIEW OF 1874, PRINTED MARCH 13, 1875.

Mr. Herzog, the delegate of Switzerland to the Monetary Conventions of 1865, 1871 has investigated the subject [silver] with care. He lays stress on the diminution by one-half since 1866 of the export of silver to the East, *arising from the advancing diffusion of European goods over the Asiatic countries.*

All the predictions of the Economist as to the course of the Asiatic trade have been falsified by the event. The flow of the metals to Asia is still as active as ever. The Economist entirely overlooks the real cause of this flow, and nearly all which it has to say about it is quite aside from the mark.

Asia was called "*a sink of silver*" in the time of the Romans, but if the view is limited to the past four centuries, the reasons why it is a sink of silver, and to some extent of gold also, will more clearly appear, because the facts of these later centuries are more exactly known.

Since 1492 the great bulk of the supply of the precious metals has been from the New World. Chevalier estimates that from the voyages of Columbus to the California gold discoveries the world's metallic supply was derived—

From the Old World	$1,072,000,000
From the New World	7,259,000,000

Since the California gold discoveries, from 1849 to 1876, both inclusive, taking the mean of the figures given by accepted authorities, the world's metallic supply was derived—

From the Old World	$827,000,000
From the New World	3,755,304,927

In the New World, in this last statement, Australia is included.

Since 1492 the flow of the precious or money metals has been continuous from the New to the Old World, and could not have been otherwise. The flow of those metals is determined by the tendency, always at work, of prices to an equilibrium. Nothing but an impassable Chinese wall could have prevented the outflow from Australia of the bulk of the $1,200,000,000 of gold produced there within the past twenty-five years. If such a wall had existed, the principal part of this gold would not have been produced, as the wages of labor would have risen so high that the cost of the gold would have exceeded its exchangeable value. No such wall exists in this case, and therefore prices are only kept high enough in Australia, relatively to prices elsewhere, by the production of gold there, to cause the constant outflow of that metal, and that condition of things will not be changed until the mines give out.

Those parts of the world which specially produce the precious metals can never have, on that account, any greater excess above their due proportion of them than is just sufficient to produce an adequate current of overflow. That is the limit of the perturbation of the money level in such cases.

The same circumstances which prevent the metals from remaining in the New World, in which they are principally mined, prevent their remaining in the country or countries in the Old World which receive them in the first instance. All the gold and silver of America, exported in the early periods of its discovery, passed to Spain, but neither did or could remain there. Until within a few years Europe has received substantially the whole of the exported gold and silver of America and Australia, and does now receive much the greater part of them, and it is through and by Europe that they have been diffused over the Old World, each portion of it always receiving and retaining its due proportion. It is these facts which have caused the flow of the metals from the Occident to the Orient during the past four centuries.

The flow depends upon the relatively excessive production of the metals in the New World, and will continue without interruption forever, subject only to the possibility that the discovery and working of mines in Asia may bring up its metallic production to the average of the general production of the world.

The due proportion of the precious metals which the different parts of the Old World will receive and retain is that proportion which is determined by the various circumstances of population, commerce, wealth, laws of currency, national habits, and vicissitudes of prosperity, adversity, growth, and decay, which fix the relative amounts of the metals held at any given period in the several subdivisions of the globe.

The flow of the metals from Europe to India may have been quickened at particular times by a specially high price for India cotton, just as the same flow to China is quickened to-day by the specially high price of raw silk. But the flow in the direction of India would have been as steady, and perhaps as great, if no such substance as cotton had ever existed. Changes are constantly occurring in the things which are the subject-matter of commerce. Industry takes one direction to-day and another to-morrow. If India could not have supplied its imperative want of silver by producing cotton, it would have supplied it by the production of something else. The export of cotton from this country does not date so far back as the adoption of the present Federal Constitution. Cultivation of it in our Southern States was preceded by that of indigo, and may be followed by something else now wholly unanticipated. It has been said of India that it never fails to produce anything which is demanded from it, or, in other words, anything which it can sell. It is now selling wheat, until lately entirely unknown in its list of exports; and is at this moment third on the list of countries furnishing wheat to England, being surpassed only by Russia and the United States.

The precise way in which the extra cotton exports of India during the American civil war and the extra prices then received by India for cotton may have affected the amount of its metallic stock is, that it was a circumstance which may have permanently enriched India as compared with Europe. If it did, by so much does it permanently enhance the percentage of the precious metals which India will retain. That is true of any other circumstance which may advance the relative position of India. It is unquestionable that British domination in India during this century has been favorable to its wealth and commerce. It has been a better government than India ever had before, subject to the objection, whatever the force of it may be, that it is a foreign domination, established and maintained by the sword.

The continuous metallic flow from Europe to Asia is determined by the fact that Europe, as the first receiver of the treasures of the New World, always has an excess of metallic money as compared with Asia. The necessarily lower wages and prices of Asia will always attract money. No "*taste for European goods*" can ever be created there which will be equal to its necessity for money, or put an end to the demands of its vast, rich, and industrious populations for the precious metals for other purposes, which arise from their immemorial usages and habits.

The extent of the metallic flow from Europe to Asia is determined in the long run, and aside from the temporary effect of exceptional circumstances, by the one single fact of the extent to which Europe receives the metals from other quarters. Before California and Australia, it was determined by the greater or less production of the Spanish-American mines, which had been, from the discovery of this continent to 1848, the chief source of the supply of the precious metals. At the beginning of this century, Humboldt estimated their annual production at forty-three million dollars, of which he computed that twenty-five millions were sent to Asia. When that production fell off so greatly after 1809, in consequence of the revolutions in Spanish America, European supplies fell off, and the flow to Asia diminished accordingly. The fact is stated correctly in the book of W. Nassau Lee, printed in 1863, entitled "*Drain of Silver to the East*," but the reason assigned for it by him is entirely erroneous, being precisely that of the present views of the Economist.

Mr. Lee says:

> Up to 1814 no great change in the normal state of things was perceptible; but in that year, *consequent upon the great increase of British imports which followed the breaking*

> *up of the old East India Company's monopoly*, the flood of silver began to shallow, and in 1832-'33 it had almost dried up. From this time the tide continued to ebb and flow with uncertain fluctuations until 1849-'50, when it set in with redoubled strength, and has since been increasing in depth and breadth with such rapidity as to cause some alarm for the equilibrium of prices in India.
>
> The returns of trade with England and China have for some years shown an average balance of £10,000,000 in favor of India.

The "*great increase of British imports after* 1814" did not result from the "*breaking up of the old East India Company's monopoly*," but was due to the fact that the metallic prices of commodities fell greatly in Europe after 1809, in consequence of a sudden diminution of the metallic supplies, consisting principally of silver from America. Humboldt estimates the annual average American silver production, at the commencement of this century, at £7,071,831. From 1809 to 1829, this annual average production was reduced, according to Jacob, to £3,109,000, and Europe, which received this production, sent less silver to Asia, for the plain reason that it had less to send. The falling prices in Europe attracted fewer commodities from India, and caused more European goods to be sent to India. It was this which caused the "*great increase of British imports after* 1814" into India, and reduced the metallic flow to India.

When the flood set in again, after 1849-'50, "*the old East India Company's monopoly*" was as much broken up as it was in 1814, and India was equally as open to unrestricted "*British imports.*" But after 1849-'50, Europe could spare both gold and silver in abundance; gold, because the mines of Australia and California were producing it; and silver, by substituting gold for it in the channels of its own circulation.

Comparing the five years after with the five years before April 30, 1849, the excess of metallic imports into India over exports, taking its trade with all nations, rose from £8,578,572 to £18,938,601. A more instructive comparison will be to take periods of ten years before and after April 30, 1849. This comparison will show a rise in the excess of Indian metallic imports from £20,699,090 to £70,721,378. It took longer than five years after April 30, 1849, to cause the new gold discoveries to be fairly felt in India. The California production was active in 1849, but Australia, until 1852, had only produced $7,000,000.

McPherson (*Commerce with India*) says:

> The Indian trade arose to a considerable magnitude at the same time that the American mines began to pour their treasures into Europe, which happily has been preserved from being overwhelmed by the inundation of the precious metals, as it must have been if no such exportation had taken place.

Jevons (*Mechanism of Money and Exchanges*, 1875) says:

> Asia is the great reservoir and sink of the precious metals. It has saved us from a commercial revolution, and taken off our hands many millions of bullion, which would be worse than useless here. From the earliest historical ages it has stood in a similar relation to Europe. In the Middle Ages it relieved Europe of the excess of Spanish-American treasure, just as it now relieves us of the excess of Australian treasure.

Nothing short of a complete interdiction of commerce and intercourse will prevent the flow of the metals from the Occident to the Orient. The tendency of money, through its influence upon prices, to come to an equilibrium, is as certain and irresistible as the tendency of water to a level, and, like that, can only be arrested by absolutely cutting off the connections.

It will be seen how untenable the view is, which the Economist insists upon in so many different forms of language, that the great supplies of the metals, principally silver, sent from Europe to the East, during the period immediately following the California and Australian discoveries, had produced, or were rapidly producing, such a saturation of Asia with the metals, manifested in advancing wages and prices, that the flow of the metals to Asia must cease, and even be changed into a reflux current. That no such saturation has yet been produced is shown by the current fact that the flow to Asia is as vigorous as ever. From the nature of the case, no such saturation ever can occur. The metallic flow could by no possibility proceed further at any time than to produce a monetary equilibrium between Europe and Asia; but this equilibrium would be forthwith disturbed again by the continuing fact that Europe is the receiver of the products of the mines, and that Asia is a great consumer of them. Water may come to a level between two connected reservoirs, but cannot remain at a level if new water flows into one of them while the water in the other is constantly oozing, leaking, and evaporating. The California and Australian discoveries increased the metallic supplies of Asia, but in no greater proportion than they increased the metallic supplies of Europe. They produced no greater effects in raising wages and prices, and in stimulating new wants and new tastes for luxury in Asia, than they did in Europe. If Asia consumes more European goods than formerly, Europe consumes more of the peculiar products of the Orient than formerly. Asia has only received, since 1848, its due proportion of the new supplies, in the form, largely, of silver thrown out of the European currencies by the substitution of gold, or, if any excess has been received, it is accounted for by an anterior deficiency. The water has merely risen to higher points than before in both the reservoirs at the same time, the rise in one corresponding always to the rise in the other. The direction of the flow has not changed, and never will change so long as one of the reservoirs is the sole or principal receiver of new supplies. No reflux current will set from the reservoir which is subjected without intermission to the exhaustion of oozings, leakages, and evaporation, and whose sole resource of recuperation is its connection with the other.

In respect to the two hundred and twenty-seven millions sterling of the metals sent by Europe to Asia during the twenty years ending with 1870, the Economist may have intended to say that it was 70 per cent. of the metallic production of California and Australia received in Europe during the same period, but it was certainly only 29 per cent. of the metallic production of the world during the same period. If to the two hundred and twenty-seven millions sterling received during those twenty years from Europe by Asia there be added what Asia may have received directly from the metal-producing countries, the aggregate would not seem to be out of proportion to Asiatic wealth, commerce, and population.

OPINIONS OF THE BRITISH SILVER COMMISSION.

The question of British trade and financial relations with India, as a part of the more general question of those relations between Asia and the Western World, occupies a leading position in the report of the British Silver Commission of 1876. The question deserved the position given to it, as the general Asiatic and special Indian demand for silver is of the first importance in fixing both its absolute value and its value relatively to gold.

The general view of the situation presented by the commission is, that the annual amount which the government of India has to pay in England by way of interest on debts and such charges of administration as are payable in England, which ranged between four and five millions sterling before the Sepoy rebellion, attained between 1861 and and 1867 the higher range of from nine to eleven millions, and in 1876 had reached fifteen millions sterling, or seventy-five million dollars. The commission note, also, the following circumstance:

> Less of the money received by Europeans in India appears to be retained in that country than was formerly the case. It has been stated that, owing to various circumstances, more funds are remitted to England, not only after fortunes have been made, but during the sojourn of the various officials, or European residents, in the country. A remittance from India to England is equivalent to a draft from England on India. It diminishes the aggregate balance which India has to claim when transactions are squared. And in proportion as this practice increases, so is the demand for silver diminished.

The commission state that in the four years ending March 31, 1872, the total merchandise exports of India were, in round numbers, £224,000,000, and the total merchandise imports were £135,500,000, and that in the four years ending March 31, 1876, the total merchandise exports were £223,000,000, and the total merchandise imports were £140,500,000. The merchandise balances of trade in favor of India were not materially different, on a comparison of the two periods, but the modes in which the balances were adjusted were materially different. Thus, during the first period, England paid India £40,000,000 in gold and silver, and £29,500,000 in government bills, representing a part of the annual collection of the interest on the debts of India. During the second period, England paid India £16,500,000 in gold and silver, and £50,500,000 in government bills. The commission treat the annual interest payments of India as so much deduction from its possible imports of specie, and while admitting that "*a desire to obtain and use silver will exist*" always in India, they regard it as a serious question, "*how, looking to the amount it has to pay to this country, it will be able to pay for that silver.*"

The question really raised by the situation, and in its nature of the first practical importance to Englishmen, while to the rest of the world its interest is purely speculative, is the reversed question of the power of India to pay in London amounts of annual interest constantly enlarging, concurrently with the necessity it is under of keeping up its stock of money by importations of silver, and concurrently with the certainty that this stock of money, happen what may to anything else, will be kept up as a matter of fact.

It is not proposed to discuss the question of the continuance of imports into India of silver for other purposes than as money. The British commission believe that the "passion for accumulating ornaments" is so strong in India that its import for that use will "displace some of the other articles imported." Be that as it may, so long as the money of India is silver, the amount of this silver money cannot be affected in any degree by the greater or less amount of Indian indebtedness to Great Britain.

In the case of countries using metallic money, the amount of such money in circulation and the flow of it, whether outward or inward, are necessarily determined by the range of prices of commercial commodities within such countries as compared with the general range of prices in the world. Money is as absolute a necessity to nations in any degree civilized and commercial as air is to the existence of the animal creation. A permanent deficiency of it below that proportion to the amount existing in the world which will maintain the general equilibrium of prices is impossible, and a similar permanent excess is equally impossible. There may be temporary deficiencies or excesses, but they speedily correct themselves. The falling prices which result from a deficiency of money stimulate exports and discourage imports until money flows in and the deficiency of it is supplied. By a reversed operation the rising prices which result from an excess of money stimulate imports and discourage exports, until money flows out and the excess is thus carried off. No nation can pay debts so as to become permanently deficient in money, or can receive payments as a creditor so as to have a permanent excess of money. In short, neither a permanent deficiency nor a permanent excess can be brought about by payments or receipts in international relations of debtor or creditor, or in any other way.

What makes it the more remarkable that the British commission should have fallen into the fundamental error on this point which runs through their entire discussion of the India problem, is the fact that they have constantly before them in the British situation the most striking illustration of the truth that the amount of money in a country is not increased by any amount it may receive as a creditor.

During the calendar year 1876 the excess of British merchandise imports over merchandise exports was, in round numbers, $800,000,000. A part of this excess represents, doubtless, freights and mercantile profits, but it largely represents the annual revenue of England, as the great creditor of the world. Whatever the exact figure of that magnificent revenue may be, there is not, on account of it, one pound the more in the monetary circulation of that country. Great Britain has nominally a good deal less metallic money than France, in round numbers $600,000,000 as compared with $1,000,000,000, although the populations are about the same. Undoubtedly, Great Britain has effectively as much, as the various expedients of economizing the use of money by checks, &c., are more resorted to than in France.

If England should determine to collect its revenue from investments abroad, for one year, in gold and silver, and if its debtors could, by possibility, pay for one year in that form, the money in the English circulation would, of course, be by so much enlarged. But as soon as the enlargement became sensible the causes of depletion would be set in operation. Prices would rise, England would be the best place for all the world to sell in, while English exports would dwindle until the equilibrium was restored.

It is by the reversed operation of the sameprinciples that the number of rupees in India is determined wholly by the commercial equilibrium of prices, and in no degree by indebtedness to England, large or small. And, by consequence, the Indian importation of silver is so determined, because India has no mines from which to extract the raw material from which rupees are manufactured, but must obtain it by purchases from abroad.

In respect to the fact noted by the British commission, that in the four years ending March 31, 1876, British remittances to India in the precious metals fell off, while remittances in government bills increased, it is sufficient to observe that simultaneous things are by no means necessarily connected things. It is related of a country gentleman who made a purchase of stocks in Wall street which resulted to his advantage that he had happened to notice that, at the time of the purchase, the thermometer stood at 75° Fahrenheit. His conclusion was to watch his thermometer, and when it marked 75°, no higher and no lower, to purchase more of the lucky stock. There is no more connection between the demand of India for silver and remittances to India in government bills than there is between the thermometer and the course of the prices of stocks, and perhaps not so much, as the weather does somewhat affect the temper and enterprises of mankind.

The account-current of India trade for the four years ending in March, 1876, as the British commission present it, consists of three items, namely, (1) the payment of interest from India to England represented by government bills drawn on India; (2) the balance in favor of India of merchandise exports over merchandise imports; and (3) the cash remitted to India by England. The material questions in the case are, which of these items is the dominating one and controls the others, and which (if either) of them is completely controlled by the other two. The British commission assumes that the dominating item is the annual interest to England, and that this will always be paid, let the other two items fare as they may. They assume, also, that the cash remittance to India is controlled by the condition of the other items, and is always merely what happens to be left after deducting from India's merchandise balance the amount of its annual interest account to England.

The actual order of pre-eminence in power of these three items is precisely the reverse of what the British commission assume it to be. The demand which India, or any other country, makes for money is the most urgent and resistless of all its demands, and overbears everything else. The demand for money, instead of taking what happens to be left after deducting imports from exports, conclusively determines, by its action upon prices, what the balance of exports over imports shall be. The balance of trade depends upon prices, and prices are controlled by the abundance or deficiency of money. In the four years ending in March, 1876, the money wants of India required and were satisfied with a remittance of treasure by England of 16½ millions sterling. In the preceding four years India had received treasure from England in a much larger measure, and its money want was temporarily less urgent. The India money-market, requiring only 16½ millions sterling in the four years ending in March, 1876, permitted a range of prices for merchandise which made the merchandise export balance what the British commission state it to have been. If their report, instead of being made July 5, 1876, had been delayed another year, they would have found the facts in a new phase. India's interest payment to England is now somewhat greater than it was on the average of the four years ending in March, 1876. Its money demand, which had lulled during those four years because the immediately preceding treasure imports had been somewhat excessive, has resumed its normal condition of activity and power, and, in fact, far exceeds the average of twenty years past. And whatever it may be, it will compel the merchandise balance and, if necessary, the debt payment to England to conform to its own superior power. This debt payment, instead of being the pre-eminent one in the list of the necessities of India, as the British commission assume it to be, is, in fact, subordinate to both the other necessities of India, for money and for merchandise.

It is as true in financial dynamics as it is in physical dynamics, that the greater force always overcomes the less. The possession by nations of their due proportion of money is an absolute necessity and an absolute certainty. The payment by nations of their debts, however desirable it may be, is neither necessary nor certain. Mankind have not had a very long experience in the matter of national debts, as they have not been much known until within a century. But it is certain that some of the most flourishing nations of Europe, as France, Austria, and Russia, have at various times repudiated, or scaled down, larger or smaller portions of their debts. Still others, as Spain and Greece, are in a chronic condition of bankruptcy. England, from 1797 to 1821, paid nothing but suspended and depreciated bank-notes. And it is now inevitable that all the nations in Europe, including England, which have very large debts, will become bankrupt, in the event of a general and protracted war. The law of morals is the same for Asia as for Europe, and the philosophy of facts is the same. If India cannot pay its debts, and also maintain its stock of money, it has no power of choice as to which of the two things it will do. Its stock of money will be maintained, and its debts will be postponed to a more convenient season, or will be reduced to more practicable figures, or will remain permanently unpaid.

It is undoubtedly true that a nation may be deprived of money of one kind by the substitution of money of another kind. No fact is more familiar than that in the experience of mankind. The English are the political masters of India. If they are restive under a drain of silver to India, and prefer a drain of gold, they may try the experiment of an exclusive gold currency there, but they will certainly not try it until they have determined to again suspend specie payments themselves and resort to paper money. Under the demands for gold from other nations, that metal does not exist, and is not at all likely to be produced in quantities sufficient to sustain a gold currency in Great Britain and India at the same time. Or, adopting a different policy, and one which is not obstructed by any physical impossibility, they may decree a paper money for India, and undertake to force its circulation there by law. To whatever extent they might succeed in that, they would arrest the further export of silver to India for monetary purposes, and might even possess themselves of more or less of the silver now in the Indian circulation. Theoretically, there are no limitations upon the omnipotence of Parliament, anywhere within the British dominion. The managers of the London Times evidently supposed that there were no practical limitations, when they proposed last summer that the Indian occupiers of lands, who possess nothing but silver rupees, should be commanded to pay their rents in gold sovereigns. The wise and cautious statesmen of England know that the practical limitations are numerous, and are very careful not to overstep them. The integrity of their great empire, encircling the globe, and embracing so many diversities of religion, habits, and race, is preserved not more by arms than by policy. They will do nothing rashly in dealing with peoples so wedded to old traditions and ways as their India subjects. That they entertain no present idea of demonetizing silver in the East is illustrated by the British royal proclamation of 1876, establishing in Mauritius a silver currency, with the Indian rupee as the unit, the same as in British Ceylon, Mauritius having had, since 1852, an exclusive standard of gold. The money of India will remain metallic and remain silver, subject to possible gradual and partial displacements by convertible and voluntarily accepted paper, until a remote future develops conditions not now possible to be foreseen. The stock of silver money needed for India will increase with its increasing exchanges, and with the progress, known to be constant, of the substitution of coin for barter in its transactions. The flow of silver thitherward, required to maintain its stock of money, will continue so long as the seas are open and commerce is unobstructed, and it will never be diminished by the payment of debts.

THE FINANCIAL THEORIES OF THE INDIA GOVERNMENT.

The governor in council of India adopted September 22, 1876, a series of resolutions upon the financial situation, of which the following was the sixth:

> When India is in a normal condition, *i. e.*, when there is no abnormal demand for any of her staples, and she is not borrowing large sums from abroad, the amount of treasure to settle her accounts with the world is not considerable, and of the treasure

received a substantial proportion has always been gold. The large imports into India since 1850 are due to abnormal circumstances, as follows:

1. The Crimean war transferred to India large demands for produce theretofore obtained from Russia.
2. The American civil war exaggerated temporarily the value of Indian cotton.
3. Great sums of money have been borrowed for—
   a. The suppression of the mutiny.
   b. The construction of railroads (guaranteed and state) and canals.
   c. The Bengal famine.

This resolution entirely ignores the general and real cause which makes India a constant importer of the precious metals, which is that it has substantially no mines, and especially it ignores the plain and almost exclusive cause of the "*large imports into India since* 1850" of the precious metals, which is their extraordinary production since 1850 in California, Australia, and, more lately, Nevada. Treating these "*large imports*" as something altogether "*abnormal*," it attempts to explain them by "*abnormal circumstances*," and assigns the chief place among these "*circumstances*" to the foreign loans of India, whereas it is entirely clear and established by ample experience that no nation ever did, or ever can, increase the amount of its metallic money by foreign loans.

In the twenty-seven years from 1849 to 1875, both inclusive, the balance of the metallic imports of India over exports, taking its trade with England and all the rest of the world together, was $1,322,941,155, one-third gold and two-thirds silver.

During the same period, the total gold and silver production of the world was $4,403,969,754.

The population of India, including the native protected states, (so called,) is, by a recent census, 237,000,000, or from one-fourth to one-fifth of the population of the globe.

It is thus certainly true that if the case is tested by the rule of population alone, India has received something more than its proportion of the increased metallic supplies since the California discoveries. But as compared with the average of the world, the wealth, industry, and development of India entitle it to a larger proportion of the precious metals than the rule of numbers does, and its people are also uniformly represented as specially addicted to the use of gold and silver ornaments and in hoarding.

Mackenzie, one of the witnesses examined by the British commission of 1876, said:

> In every large village there is a silversmith, and as soon as a man gets a few rupees he employs the silversmith to come to his house and make the ornaments. Although the peasantry in India have poor houses, yet the amount of ornaments they have would exceed in value the furniture and utensils of the same class of peasantry in England.

That the treasure received by India from 1849 to 1875 did not overstock it is proved by the fact that, although silver has risen very greatly in value and purchasing power within four years, or, in other words, is more costly to obtain than it was four years ago, the demand of India for it, and the purchases of it made by India during the year 1876, and so far in 1877, are beyond the average of the preceding twenty-seven years.

Whether India will absorb as much treasure in twenty-seven years, beginning with 1876, as in the twenty-seven years ending in 1875, will be influenced in no degree by any of the considerations referred to either by the London Economist or the India government.

It will be determined primarily by the amount of the aggregate metallic production of the world during the current twenty-seven years. In 1832, the flow of the metals to India "*almost dried up.*" That was because the Spanish-American mines had then "*almost dried up*," and because Europe held on to what little was received from them. The flow to India commenced again after 1850 in a deeper and broader current than ever before. That was because the metallic production of the world had then become greater than ever before.

Two circumstances have increased the proportion received by India of the total metallic production during the past twenty-seven years:

First. The abandonment by the United States and by the greater part of Europe since 1850 of the use of metallic money and the substitution of a forced circulation of paper. This, of course, has enabled India and all other metal-using countries to obtain more of the current metallic supplies than would otherwise have fallen to their share.

Second. The great progress made in India during recent years in substituting cash for barter in its internal transactions.

The India government in this enumeration of "*abnormal*" causes of India's metallic imports since 1850 overlook both these circumstances. The British commission of 1876 dwell largely upon the one last named and present the facts relating to it with great fullness.

Mr. Lee, writing in 1863, (*Drain of Silver to the East*,) said that the use of coins was even then almost unknown in India outside of the cities, and he estimated that two thousand million dollars of additional coined money would be needed to properly supply it. The real population of India is now known to be two hundred and thirty-seven millions, while Mr. Lee's estimate of the coin needed for its wants was based on an estimated population of only one hundred and eighty millions. If the coins are being constantly worked up into ornaments, in the manner described by Mr. Mackenzie, the required new coinage must be greater than Mr. Lee's estimate, in some proportion not easy to compute.

The testimony taken by the British commission of 1876 is all to the effect that large parts of India are still to be supplied with coins. That commission say:

> The facts warrant the conclusion that the use of silver coin has greatly extended in India, *and will continue to extend*, not so much by the use of more silver in the territories already occupied by the existing currency as by the gradual increase of its use in the remoter parts of India.

Upon the whole, the evidence seems to be that the introduction of coins into new Indian areas of circulation will continue as active during the current twenty-seven years as during the past twenty-seven. If this proves to be so, no circumstance now suggests itself calculated to diminish hereafter the proportion which India has been taking, since 1849, of the total metallic production of the world, except that suspensions of specie payments elsewhere may not occur upon so extensive a scale as heretofore. And even if India shall hereafter take a somewhat less proportion of the combined production of the two metals, it might still maintain and even increase its absorption of silver. Instead of importing treasure in the ratio of two parts of silver to one of gold, the India demand for its money, which is silver, has only to become more urgent to change the ratio of silver to three parts out of four or four parts out of five.

There has really been nothing "*abnormal*" in the metallic imports of India, since 1850, which required the India government to cast about for an explanation in some "*abnormal circumstance*." Undoubtedly they have been extraordinarily large, but so have been the total metallic supplies of the world during the same period. Comparing India with Great Britain, the excess of metallic imports by the latter since the California discoveries would seem on the face of it to be decidedly the most extraordinary and "*abnormal.*"

The imports of coin and bullion into Great Britain and Ireland were not registered at the custom-house before November, 1857. The official statements can, therefore, only be given for the eighteen years from 1858 to 1875, both inclusive, of the imports and exports of the precious metals. The figures are as follows:

	Imports.	Exports.
Gold	£331, 217, 152	£252, 153, 402
Silver	185, 858, 595	172, 555, 470
Total	517, 075, 747	424, 708, 872

Assuming the same ratio of excess of metallic exports over imports for the nine years ending with 1857, the excess for the twenty-seven years ending with 1875 would be £138,550,312, or, taking the pound at $4.85, would be $768,969,014. During the same period, the excess of metallic imports into India over exports was $1,322,941,155. Considering that the population of India is seven or eight times greater than that of Great Britain and Ireland, that India has, since 1848, created the greater part of its metallic currency by purchasing and coining silver, while England had only to keep good a metallic currency already existing in 1848, and that national habits in India favor so large a use of the metals, especially of silver, for other uses than as money, it is much more easy to account for the absorption of $1,322,941,155 by India than the absorption of $768,969,014 by Great Britain. The greater wealth of Great Britain does not explain an absorption of the precious metals more than four times as great *per capita* as that of India, which these figures show. The use of the metals, either as money or for ornament and display, does not necessarily increase with wealth and civilization. France has always had more metallic money *per capita* than England, and the evidence seems to be that in all those parts of India in which the use of money has fully superseded barter, more metallic money *per capita* is used than in England.

It would be a very grave fact, as affecting the future value of the metals, and especially of silver, if the movement of treasure to India since 1850 was really abnormal and ought to be principally ascribed to the negotiation of loans in England. On that view, which is the one taken by the India government, the movement of treasure to India must now substantially cease, as these loans are already quite as large as England deems to be safe, and will be increased only under some such overpowering necessity as famine or war. This view is not the correct one. It is based upon an entire misconception of the history of India and of Indian financial and trading relations with the rest of the world, and it involves a theory in respect to the effect of foreign loans which is contrary to sound reasoning and to experience.

Foreign loans are never ultimately realized in money. They are very rarely even temporarily and partially so realized, and, when they are, the money so received immediately flows out. It must do so, because it must raise the prices of the country receiving it, and thereby stimulate merchandise imports and diminish merchandise exports. The amount of metallic money a country may receive may be temporarily affected by accidental circumstances, such as a foreign loan, but the amount it can permanently retain is fixed by the inflexible rule that it must be such an amount as is consistent with the range of prices which the necessary commercial and monetary equilibrium of the world imposes upon every country having commercial connections with other countries.

If this range of prices, which is permanently the only possible one, is temporarily exceeded, money flows out until prices fall to the proper level, and, if prices go temporarily below this range, money flows in until they are restored to the proper level. Disregarding all theoretical refinements as to the exact office or offices of money, it is sufficient to know that there is a necessary relation between the volume of money and prices, and that therefore the tendency of prices, always at work, to come to an equilibrium between commercial countries, and which may be conveniently described as the law of prices, must at last control the flow and distribution of money.

Disturbing circumstances are of various kinds. Among them have been the facts that the bulk of the money-metals was procured in limited localities, or was received by a single country. That these circumstances only temporarily retarded the equable diffusion of the metals, was shown in the cases which conspicuously arrested the attention of mankind, of the Spanish-American countries which for more than three centuries furnished nearly the entire metallic supply of the world, and of Spain, which for a considerable period largely monopolized the metallic exports from its colonies. It was soon seen that the Spanish-American countries, which produced the metals, and Spain, which principally received them, only had permanently just enough more metallic money than they would otherwise have possessed, to set in motion and keep in motion the current of outflow. Instructed by those examples, mankind at once anticipated what they have actually witnessed in the recent cases of Australia and California. Both those regions, no matter how rich in metallic production, are bound rigorously and inexorably to a certain range of metallic prices, any permanent excess beyond which would cause them to be entirely stripped of money, and, as their prices must have a certain range, they can have no other volume of metallic money than such as is consistent with that range.

Another circumstance which may possibly disturb for a time the monetary equilibrium is that of international loans. But this equilibrium speedily recovers from a disturbance, no matter what the cause of the disturbance may be, and illustrations are innumerable of the fact that countries in the long run acquire no money by borrowing abroad. This country has been conspicuous for such borrowing since the civil war, and while these borrowings have been in progress metallic money, instead of flowing into it, has flowed out of it. The case of the Australian colonies is similar to that of this country, in the fact of the possession of abundant mines, and their borrowing experience has had the same results. They are now in the full career of negotiating loans in England, under the encouragement of English bankers and manufacturers, who profit thereby; but these loans, as in our case, instead of carrying money from England to Australia, do not even diminish in the least degree the contrary flow of it from Australia to England. Russia, also a mining country, has pushed borrowing abroad since the Crimean war to a point seriously menacing its credit, but with all its foreign loans, added to the treasures of the Ural and of the Siberian gold washings, the only money found there is the paper rouble. Nowhere among all the countries making foreign loans is there perceived any inward flow of metallic money, except in the solitary case of India, which of itself suggests what is otherwise established to be true, that the inward flow in that case is due to other causes.

If we pass from the borrowing to the lending side in international transactions we see the same thing in a reversed view. Lending nations never part with any money. England, which has been making loans for fifty years, never had any approximation to the amount of money it has loaned, and possesses as much now as it ever did. Its loans have been, in substance, mere credits to draw upon in payment for merchandise, and their net result has been the conversion of English iron, coals, cotton cloths, and similar things, at round prices and round profits, into foreign securities. As the borrowing nations obtained no money, and only swelled their merchandise imports, England parted with no money and only swelled its exports. The description given by a late Secretary of the Treasury (Governor Boutwell) of his experience in loan negotiations in England has been often quoted, and is very familiar. He was politely informed by the Bank of England that the English would be very happy to take his loans to any desired extent, but it must be on the condition that he would agree not to take any money away from London.

The recent extraordinary case of a war-fine of one thousand million dollars imposed by Germany upon France, and all actually paid by France within a space measured by months, illustrates in its consequences the sure and speedy operation of the economic laws which restore the monetary equilibrium, however extreme and violent the disturbance of it may be. The fine was paid, either in actual specie or in bills of exchange on London and other specie-paying points. France borrowed nothing abroad wherewith to make the payment, and at the end of this vast operation is found to be possessed of as much gold and silver as when the operation began, while Germany has permanently gained no gold and silver by it. The money flowed out of Germany as fast as it flowed in, from the inflation of prices which it produced. France, on the other hand, has recovered, by increased exports of merchandise, all the money paid out for the fine, and has actually prospered from the enlargement and stimulation of the industries which have furnished the means for these increased exports, which would be the experience of this country if it would set resolutely about paying off its foreign debts. But, irrespective of all other aspects of the case, it seems to be clear that, if the monetary equilibrium between Germany and France was only transiently disturbed by the memorable transaction of the war-fine, it cannot have been affected between England and India by the loans made at intervals during a series of years, which are referred to in the sixth resolution (September, 1876,) of the India government.

It will not escape the most casual observation that the increased cotton export of India and the loans made by England to India did not occur until the metallic import, of which they are proposed as the explanations, was already under full headway.

The world was so stocked with cotton by the unprecedented American crop of 1860 that it was not until 1862 that Indian cotton-exporters began to profit by the American civil war. The India debt to England, direct and by way of guarantees of railroad and canal investments, has grown up principally since 1862, the annual charges upon it having swollen from four millions sterling in that year to fifteen millions sterling in 1876. In fact, in the eight years after April 30, 1849, India incurred no direct debt in England, and in the same eight years the total of its debt, incurred in the shape of railroad and canal guarantees, was only £7,406,240. Manifestly, the sudden rise of Indian metallic imports to £70,721,378 in the decade after April 30, 1849, compared with £20,699,090 during the preceding decade, cannot be explained by the circumstances recited by the India government. It has been said that coming events cast their shadows before, but it has never been said that coming events can be preceded by their consequences.

To whatever extent, great or small, India may profit by better markets while Russia is engaged in war, it certainly cannot be described as an extraordinary fact that Russia was so engaged two years out of the twenty-seven ending with 1875. It will not be extraordinary if it should be engaged in war during a much larger part of the current twenty-seven years. It seems now to be preparing for a war, the duration and scope of which nobody can foresee. It was said by an old English philosopher that war was the normal condition of man in a state of nature. We are farther removed from that state than we were in Hobbes's time, and it is to be hoped that the world has since improved. But it has certainly not improved so much that a condition of war two years out of twenty-seven can be described as extraordinary and "*abnormal*," in the case of Russia, or of any country.

The increased quantity and price of India cotton exports during the American civil war, and during the subsequent period of revolution in the labor system of the Southern States, may doubtless be fairly said to have been extraordinary and "*abnormal*," both in the cause and extent of the fact. But a critical examination of India trade during so long a period as twenty-seven years would probably show that the profits to India resulting from the large cotton sales commencing in 1862, have been to some extent offset by periods of depression in the prices of the various exports of India, including cotton, and by periods when India has been obliged to pay extraordinary prices for some of its imports, as notably for English coals and iron in and about 1872–'73. Commercial fluctuations of all kinds are of constant occurrence. Ordinarily, they balance and compensate each other. It is sufficient that we can be sure that it is not in accidental and temporary circumstances that the true explanation of an immemorial and constant fact, like that of the import of the precious metals by India, is to be found.

The conditions which determine the flow of the metals to the East and to India may or may not be as permanent as the configuration of the American continent which determines the flow of the Gulf Stream. Their permanency cannot, at any rate, be so certainly known. The facts of geography are patent to the eye, while the possibilities of mining are hidden in the bowels of the earth. There can be no absolute assurance that new discoveries may not reverse the history of four centuries, and cause the current of the metals to set from the Old World to the New. But for that immediate and limited future, beyond which men need not look in the practical concerns of life, confidence may reasonably remain unshaken that the metals will still flow as they have flowed without interruption since the voyages of Columbus, and that their distribution among the different parts of the Old World will be governed as heretofore, and by the same circumstances of numbers, wealth, industry, tastes, habits, and the possession or lack of mines.

THE CONSTITUTIONAL POWERS OF CONGRESS AND THE STATES IN RESPECT TO METALLIC MONEY.

The provisions of the Constitution of the United States in respect to money are—

First. The grant to Congress of the two powers, to coin money and regulate its value, and to regulate the value of foreign coins. The coinage power is made exclusive in Congress by a prohibition of it to the States. The regulation of the value of foreign coins is not prohibited to the States, and it is therefore a power which they may exercise if Congress does not exercise it.

Second. The provision that "*no State shall make anything but gold and coins a tender in payment of debts.*"

There being no special grants of power to Congress to establish legal tenders, or to do anything in respect to "*money*" except to "*coin*" it, and the provision above quoted in respect to the States being a recognition that the power to establish legal tenders was one of their reserved powers, it was long held that this was a "*hard-money Government,*" and that gold and silver were fixed as the "*constitutional money.*" The argument on this point was the short one that the States alone had jurisdiction over legal tenders, and that they were expressly restrained from making "*anything but gold and silver coin a tender in payment of debts.*"

Thus, Albert Gallatin, (in 1831,) after quoting the restriction upon the States, says:

> As Congress has no authority to make anything whatever a tender in payment of private debts, it necessarily follows that nothing but gold and silver coin can be made a legal tender for that purpose.

Mr. Webster (speech in United States Senate, December 21, 1836, presented the same view more at large, as follows:

> Most unquestionably there is no legal tender, and there can be no legal tender in this country but gold and silver, either the coinage of our own mints or foreign coins, at rates regulated by Congress. This is a constitutional principle, perfectly plain, and of the very highest importance. The States are expressly prohibited from making anything but gold and silver a tender in payment of debts; and although no such prohibition is applied to Congress in express terms, *yet Congress has no power granted to it in this respect, but to coin money and regulate the value of foreign coins.*
>
> The legal tender, therefore, the constitutional standard of value, is established and cannot be overthrown. I am certainly of opinion that gold and silver, at rates fixed by Congress, constitute the legal standard of values in this country, and that neither Congress nor any State has authority to establish any other standard *or to displace this.*

The same general views were taken by the United States Supreme Court in Ogden *vs.* Saunders, (12 Wheaton, 265,) and in the opinions of Justices Clifford and Field in the Legal-Tender Cases, (12 Wallace.)

The final decision of the majority of the United States Supreme Court in the Legal-Tender Cases (12 Wallace) is so recent and so familiarly known that any enlarged statement of its character and results is unnecessary. For the present, it will be sufficient to observe that this decision does not affirm the possession by Congress of any general and substantive authority to create tenders. What it settles is, that special circumstances may arise, under which it may be "*necessary and proper,*" within the meaning of those words as used in the Constitution, that Congress, in the execution of its admitted powers, should give the legal-tender function to paper, no express prohibition in that respect having been imposed upon Congress. There is nothing in the decision which affirms a right in Congress to take away the legal-tender function from gold and silver coins, which have been money in this country from its first settlement, and which the States are, by the Constitution of the United States, expressly authorized to make "*a tender in payment of debts.*" The law of Congress of 1862, which was under judicial review in the Legal-Tender Cases, did not assume to take away the legal-tender function from either gold or silver. What that law did was to create an additional tender by giving the function of tender to certain Treasury-notes. This law was passed by Congress and sustained by the Supreme Court, not upon the ground that Congress had any general authority to create paper money, but that, in the special circumstance existing, it might give the legal-tender function to a particular description of paper, as a "*necessary and proper*" means of executing certain powers, its possession of which was conceded.

It is believed that a proper consideration of the subject will show that a power thus obtained by implication to make paper a tender under certain circumstances, can never be extended to the altogether different act of taking away the legal-tender function of gold and silver coins.

GOLD AND SILVER ARE MONEY IN THE UNITED STATES BY THE COMMON LAW.

In the Institutes, pages 574 to 579, Coke discusses at large the common law of England on this subject, saying:

> No subject can be enforced to take, in buying or selling or other payment, any money made but only of lawful metal; that is, of silver or gold.
>
> The money of England is the treasure of England, and nothing is said to be treasure-trove but gold or silver.
>
> And this is the reason that the law doth give to the King mines of gold or silver, thereof to make money, and not any other metal which a subject may have, because thereof money cannot be made.

It was by virtue of the English common law, brought here by the English subjects who founded these States, that gold and silver were money and lawful tender, down to the time of the adoption of the present Federal Constitution.

A royal proclamation in 1704, and a confirmatory act of Parliament in 1707, fixed the rates at which certain specified silver coins should be current in the American colonies, it being recited in both the proclamation and act that diversities in rating such coins, injurious to trade, had arisen. But this proclamation and act, and all the statutes of the colonies fixing the rates at which specified gold and silver coins should pass current, proceed upon the assumed fact and law that gold and silver were money and a lawful tender.

The common law of England, under which gold and silver were money, remained unaltered by any act of the British Parliament at the time our political connection with that country was severed in 1776, and for forty years afterward. Some respectable writers have fallen into the error that the act of Parliament of 1774 limited the legal-tender capacity of silver to sums not exceeding £25. Even Sir Robert Peel made that mistake in his speech on the Bank Act in 1844. What that act really prescribed, after reciting that the silver coins in use were much reduced below weight by wear, was, that in sums exceeding £25 they should be a tender, not by tale, but by weight at the mint-price of silver. Similar provisions exist now, both in England and the United States, in respect to gold coins of light weight. Silver was, therefore, a legal tender in England and in its colonies, for all sums, and upon an equal footing with gold in all respects, down to the time when the separation and independence of these American colonies were declared and maintained.

In most, if not in all of the States, it has been by virtue of the English common law, and not by virtue of new statutes, that gold and silver coins have been money and legal tenders since the adoption of the Federal Constitution.

In the South Carolina case of McClarin *vs.* Nesbitt, (Nott & McCord, vol, 2, page 519,) the supreme court of that State (1820) say:

> The only legal tenders in this State are gold and silver, and they are so by virtue of the common law.
>
> At common law (2 Institutes, 577) only gold and silver were a legal tender. It was under that common law that after the act (of South Carolina) of February 6, 1752, forbidding paper, gold and silver became such.

The Federal Constitution does not command the States to make gold and silver coins a legal tender. Such a command was quite unnecessary. Gold and silver coins were already a legal tender, and always have been so in this country by the common law. But the Constitution, by prohibiting the States from making anything else a legal tender, recognizes the authority of the States to enact and maintain the legal-tender capacity of such coins.

The power of prescribing other and additional legal tenders at discretion had been largely used in giving forced currency to paper by the States, under the old confederation, as it had been used by them when they were in the colonial condition, prior to July 4, 1776. It was so exercised by them during the revolutionary war, at the special instance and request of the Congress of the Confederation, in aid of the currency known as the continental bills. Their complete possession of the power to create other tenders than gold and silver coins, until the present Constitution limited it to gold and silver coins, has not been questioned. But neither as colonies nor under the confederation had they ever assumed to take away the legal-tender functions from gold or silver.

THE STATES NOT ALLOWED TO SELECT EITHER GOLD OR SILVER AS A SOLE TENDER.

It seems clear that the States would be within the restriction of the United States Constitution, in prescribing that gold and silver coins fabricated by the United States, or foreign gold and silver coins at values regulated by Congress, should be legal tenders. But it may be suggested that they would also be within the restriction of the United States Constitution, in prescribing that legal tenders should be only such coins when struck from gold, or only such coins when struck from silver. This would be giving to the word "and" in the restriction a disjunctive instead of a conjunctive meaning, and as if it had been written—

> No State shall make anything but gold OR silver coin a tender in payment of debts.

Undoubtedly, a disjunctive meaning may be given to the word "and," when the necessities of the context and of the surrounding facts require a disjunctive meaning. But there can be no color for it here, when the ordinary meaning, which is conjunctive, is exactly adapted to gold and silver, which constituted money, not separately but conjunctively, in the immemorial practice of mankind, and in law and in fact in this country at the date of the adoption of the Constitution. It cannot be reasonably supposed that either those who framed that instrument, or the people who ratified it, had any other idea of metallic money than that of the combined mass of gold and silver then universally recognized as such.

Of the many objections to the construction that the States may confine the legal-tender function to either metal, or give it to the two combined, at their pleasure and discretion, it will be sufficient to note the three following:

1. It involves the wholly inadmissible proposition that either or all of the States may reject as a tender one of two metals, both of which Congress is unquestionably authorized to coin as money.

2. On this construction there would be no security that the standard of value in the United States would be uniform. Some States might adopt gold, others silver, and still others the two metals in conjunction.

3. On this construction there would be no stable standard of value in any of the States, as what they did to-day they could undo to-morrow, and as a standard of gold is fundamentally different from a standard of silver, and a standard of either of the metals separately is fundamentally different from a standard of the two combined.

If the Constitution is really susceptible of a construction involving such results, it has certainly failed lamentably to secure that "sound and uniform currency," which Mr. Webster says was "one of the greatest ends contemplated in the adoption of it."

On the 22d of March, 1875, the State of New York led the way in legislating in respect to the entirely novel departure of demonetizing silver, which was initiated in the coinage act of February 12, 1873, and consummated by certain words actually found in the United States Revised Statutes of June, 1874, although having no rightful place there. The full text of the New York law referred to, including the title, is as ollows:

AN ACT to establish specie payments on all contracts or obligations payable in this State in dollars and made after January first, eighteen hundred and seventy-nine.

SECTION 1. All taxes levied and confirmed in this State on and after January first, eighteen hundred and seventy-nine, shall be collected in gold, United States gold-certificates, or national-bank notes which are redeemable in gold on demand.

SEC. 2. Every contract or obligation, made or implied, and payable within this State, and made or implied after January first, eighteen hundred and seventy-nine, and payable in dollars, but not in a specified kind of dollars, shall be payable in United States coin of the standard of weight and fineness established by the laws of the United States at the time the contract or obligation shall have been made or implied.

This New York law was enacted two months after the passage of an act of Congress providing for a coin resumption in gold January 1, 1879, and it is apparent that the framers of the New York law were disposed to go to every possible length in sanctioning and sustaining the policy of Congress.

In respect to the medium in which New York may require its taxes to be paid, there is no limit upon the sovereign discretion and power of that State, and this law is both minutely and comprehensively rigorous in demanding of the tax-payer either "gold, United States gold-certificates, or national-bank notes which are redeemable in gold on demand."

When it comes to deal, however, in the second section, with private debts, express or implied, the word "gold" disappears and the word "coin" takes its place. In the title of the bill the word "gold" is softened to the word "specie." With the *animus* of the framers of the law, as disclosed in the first section, it is quite certain that "gold" disappeared from the second section, and from the title, under some coercion which was irresistible. This coercion, plainly enough, was the command of the Constitution of the United States, that "no State shall make anything but gold AND silver coin a tender in payment of debts."

This New York law is thus a recognition, and none the less entitled to weight because forced and unwilling, that the States must give the power of tender to both the gold and silver coins struck under authority of Congress. This duty rests upon all the States, and will probably be discharged by most of them without reluctance.

DEMONETIZATION.

In the legal-tender cases, Clifford, J., says:

> Very strong doubts are entertained whether an act of Congress is absolutely necessary to constitute the gold and silver coins of the United States, fabricated and stamped as such by the proper executive officers of the Mint, a legal tender in payment of debts. Constituted, as such coins are by the Constitution, the standard of value, the better opinion would seem to be that they become legal tender for that purpose, if minted of the required weight and fineness.

In the same cases, Field, J., says:

> Money being a standard, its coins or pieces are necessarily a legal tender. The provisions in the different coinage-acts that the coins to be struck shall be such legal tender are merely declaratory of their effect when offered in payment, and are not essential to give them that character.

These are the views of eminent jurists, and no authorities can be cited for any different views on this subject. They fully cover the ground that coins "minted of the required weight and fineness" are "necessarily a legal tender," and that they are so not from any law of Congress but from the provisions of the Constitution. It seems almost superfluous to add that Congress cannot take from them a function conferred by the higher authority of the Constitution.

In the same legal-tender cases, Potter, *arguendo*, finds still another basis for the legal-tender power of coins:

> Money is, *ex necessitate*, a tender in payment of debts due in money, even if not so declared by law, just as coals of a specified kind are a lawful tender in discharge of a contract for coal, and cotton of a contract calling for cotton.

If Congress can demonetize silver, it can demonetize gold, and it can also demonetize both the metals at one and the same time.

A POWER IN CONGRESS, ARISING BY IMPLICATION, TO CREATE PAPER-MONEY, CANNOT INCLUDE A POWER TO DEMONETIZE GOLD OR SILVER.

This question of a congressional demonetization of either of the precious metals is wholly different from, and in no way involved in, questions which have been raised or may be raised as to the power of Congress to create additional tenders by giving a legal-tender capacity to paper, as a supposed necessary means to execute other expressed powers.

In the Legal-Tender Cases, (12 Wallace,) the general grounds taken in the opinions of a majority of the court were, that Congress must necessarily determine in the first instance, subject to judicial review, what laws are necessary to execute its admitted powers; that Congress had determined that giving the function of legal tender to certain paper was indispensable to the execution of its powers to borrow money, raise and equip armies, and suppress insurrection; that giving such a function to Treasury-notes was certainly one of the measures appropriate to those objects; and that the court did not feel justified in overriding the decision of Congress that it was a measure necessary for those objects.

The law which was under this judicial consideration neither demonetized any existing money, nor did it involve the assertion by Congress of any general power over the subject of legal-tenders. It involved only the question whether giving the function of tender to a specified description of paper was a fairly implied power under the circumstances.

Other questions have been raised in this country, but have not reached a stage requiring judicial determination, such as that of the power of Congress to create paper-money, as a means of regulating commerce, collecting taxes, &c. It is not proposed to discuss these questions, but merely to state the nature of them. For the matter in hand, it need only be observed:

1. That no general authority over legal-tenders is given to Congress by express grant.

2. That no such general authority and no generaal authority of any description can ever be obtained by implication. The case of an implied power is always a special case, to be decided on the exact language of the law in which such power is asserted and exercised, and on the particular circumstances. In the judgment of Congress, and of the Supreme Court, the necessity had arisen from the exigencies of the civil war to give the legal-tender function to a particular description of paper, in order to execute certain powers of Congress. This may happen again, in the opinion of the same authorities, from extraordinary exigencies, rendering it impracticable to collect taxes, to pay public debts, or execute other powers of Congress, in any other way. But in the case which has happened, what was held to be implied was not a general authority over tenders, but only the authority to make paper a tender in the precise circumstances then existing. And in any future case an implied power to make paper a tender can never go beyond the special necessities of such case, and can never be expanded to the proportions of a general control over tenders.

3. No case has been more familiar in the legal and political discussions of the last half-century than that of *Bank* vs. *McCulloch*, (4 Wheaton, 316,) in which the opinion of the Supreme Court of the United States was drawn by Chief-Justice Marshall. The case arose out of the claim of the State of Maryland to tax the business and operations within its territorial limits of the second Bank of the United States. Judge Marshall sustained the implied power of Congress to charter such a bank, and disallowed the attempted taxation, on the ground that, if Maryland could tax at all, it could tax to the extent of practical prohibition, and thereby nullify a power of Congress, decided by the Court to exist by a fair implication. In respect to the powers of the National and State governments Judge Marshall said:

> There is a plain repugnance in conferring on one government a power to control the constitutional measures of another.

This rule is a two-edged sword, and Judge Marshall used both edges. He would not concede to Maryland the right to destroy by taxation a business and operations which he held that Congress had an implied power to authorize; and, on the other hand, he would not concede to Congress the right to shield from Maryland taxation any property drawn into the business and operations of a fiscal agency created under a merely implied power, which had been and would otherwise have remained subject to such taxation. His conclusion is:

> This opinion does not deprive the States of any resources which they originally possessed. It does not extend to a tax paid by the real property of the bank, nor to a tax on the interest which the citizens of Maryland may have in the institution.

The principles laid down in *Bank* vs. *McCulloch* are recognized in the legislation which governs the taxation of the present national banks. The power to create such banks is only an implied one, and it is so exercised as not to impair the right of the States to impose taxes. The express powers of Congress would not be subject to such a limitation.

4. The range of implication, as a source of congressional power, is undoubtedly wide. The language of courts defining its limits, although presumably always as precise as the subject admits of, is often somewhat elastic in the possibilities of its meaning. But there is one clear and inflexible rule governing this kind of implication, which is laid down in all the cases and by all the courts and authorities. That rule is, that no power shall ever be obtained by implication which contra-

venes any expressed language of the Constitution. Under this rule Congress would not be permitted to make paper a legal tender, but would be compelled to find some other means of executing its expressed powers, if the Constitution imposed upon Congress the prohibition imposed upon the States against making anything but gold and silver coins a tender. And under this same rule no power can ever be implied in Congress in contravention of the authority to make gold and silver coins a tender, which the Constitution does by express words recognize as belonging to the States, and which is the same thing as if the Constitution did by express words grant that authority to the States.

The means which Congress may use, on the ground of being necessary and proper to the execution of an expressed power, are described by Kent (Commentaries, 1250) as—

> All the means fairly applicable to the attainment of the power, *and not specially precluded by specified exceptions.*

By Story (Commentaries on the Constitution, 1245) as—

> All the means requisite and fairly applicable to the attainment of the end of the power, *unless they are excepted in the Constitution.*

By Marshall (Bank *vs.* McCulloch, 4 Wheaton, 316) as—

> All the means which are appropriate, which are plainly adapted to the end, *which are not prohibited,* but *consist with the letter and spirit of the Constitution.*

It can make no difference whether a proposed act of Congress contravenes an express prohibition imposed upon it, or whether the effect of the act is to defeat an express grant to the States. In either case the rule is equally applicable that no power can be obtained by Congress by implication inconsistent with the expressed provisions of the Constitution. It therefore results that the implied power of Congress to give the legal-tender function to paper under certain circumstances can never be so extended as to divest the States of their expressly recognized right to make gold and silver coins a tender in payment of debts. The choice of means is never so narrowed that means cannot be found to execute the expressed powers of Congress without overstepping expressed limitations.

5. Even if it could be maintained, as it cannot be, that the power to demonetize gold or silver, which contravenes the express power of the States to make them legal tender, can ever be obtained by implication, it is not easily conceivable by what species of implication such an act of mere negation as an enactment that gold or silver shall not be a tender, can be necessary to enable Congress to perform any of the functions devolved upon it by the Constitution. It may be true that a power can be implied to issue paper in aid of the expressed powers to borrow money, regulate commerce, declare war, support armies, or collect taxes, but until some form of paper can be devised not hitherto known superior in market-value to metallic money, it cannot be necessary to the circulation of paper that metallic money should be demonetized. No such thing was thought of when the act of February 25, 1862, creating paper legal tenders, was enacted. No implication less sweeping than the implication of a general power to regulate the currency and to control the question of money in all its aspects will cover the ground of demonetizing either metal, and such a power as that will cover the ground of demonetizing both and establishing any conceivable substitute for them.

THE POWER OF CONGRESS OVER MONEY AS AFFECTED BY THE DECISION OF THE LEGAL-TENDER CASES.

There must be admitted to be some hazards in making the concession which the precedent of the legal-tender paper of the civil war, and the decision of the Supreme Court thereupon, compel to be made, that exigencies may arise when it will be "*necessary and proper*" for Congress, in order to execute its expressed powers, to force the currency of paper by law. Whatever the hazards may be, there is no escape from them. It is, however, true that the exigency which existed in the only case which has occurred of the exercise of this power, was real, and that the patriotic motives and high intelligence of those who determined that the necessity for it existed are unquestionable. For the future it will moderate, if it does not wholly dispel alarms, to remember that sentiments of justice and of respect for private rights are nowhere so strong in this country as among the masses of the people, and that while they have often been the victims they have never been the perpetrators of frauds by means of monetary legislation.

Paper money, issued on the ground of being necessary in the execution of expressed powers of Congress, cannot altogether escape certain limitations. On the other hand, the demonetization by Congress of either gold or silver is impossible except upon the theory of the possession by Congress of a general authority over money and tenders, and such authority, if it really exists, is not restricted, as in the case of the States, by the prohibition that nothing but gold and silver coins shall be made a tender. If Congress can demonetize silver it can demonetize gold, or both gold and silver, and can monetize any substance or any form of paper. Narrowing money to gold is for the intended although really doubtful advantage of creditors, but they have more to lose than to gain by affirming a power which can be so easily used in a different direction and to their ruin.

There is no rule of political ethics which either will or ought to restrain those who deny the constitutional existence of a power actually exercised by Congress, from exercising it themselves, if they can. It would be giving a bounty upon the usurpation of a power to leave the use and enjoyment of it exclusively to those who instigate the usurpation, and, furthermore, the question of the constitutionality of a power is ended and concluded for the time being so long as its actual exercise is an existing fact. To say that any power is certain in the end to be used in the interest of the preponderating political forces of the country, would be to say that the people can be reached only by appeals to their selfishness, and are insensible to considerations of justice and patriotism, which is not true. But it is idle to expect that men will not be more solicitous about the protection of their own rights, when they are invaded, than about the rights of the invaders, and it is no new lesson for mankind to learn, that defensive war is never waged more efficiently than when it is waged offensively.

FOREIGN COINS. IF CONGRESS DOES NOT REGULATE THEIR VALUE THE STATES MAY REGULATE IT, AND MAKE THEM A TENDER.

Section 3582 of the U. S. Revised Statutes is in the following words:

> No foreign gold or silver coins shall be a legal tender in payment of debts.

The reference in the margin is to the third section of the act of February 21, 1857, entitled "An act relating to foreign coins," &c., which third section is in the following words:

> All former acts authorizing the currency of foreign gold and silver coins and declaring the same a legal tender in payment of debts are hereby repealed, but it shall be the duty of the Director of the Mint to cause assays to be made from time to time of such foreign coins as may be known to our commerce to determine their average weight, fineness, and value, and to embrace in his annual report a statement thereof.

Subsequently, on the 3d of March, 1873, in the first section of "An act to establish the custom-house valuation of the sovereign," &c., it was enacted as follows:

> The value of foreign coin as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the first day of January by the Secretary of the Treasury.

The foregoing first section of the act of March 3, 1873, is embodied without any change in the Revised Statutes, of which it constitutes section numbered 3564.

Two constructions of the act of February 21, 1857, are possible. One is, that while it does not expressly prohibit the currency of foreign coins, its object and its effect were practically to prevent their currency, by a repeal of all laws regulating their value. Another is, that it substitutes a new rule of valuation. All the former laws, which had been very numerous and had been frequently changed, had specified in dollars and cents the tender value of each and every coin named in them. If the act of February 21, 1857, had repealed these former laws and then stopped, no regulation would have remained of the values at which they should be current. But the act of February 21, 1857, does not stop with the repeal of former laws, but proceeds to prescribe a new mode of ascertaining and promulgating the value of foreign coins.

When two constructions of a law are fairly possible, that construction is to be adopted which will make the law conformable to the duty of the legislators and bring it within their constitutional power, while that construction is to be avoided under which the law would be in derogation of their duty, and plainly transcend their authority. The power which Congress has in the premises is very precisely written down in the Constitution. It is neither to prohibit nor to authorize the circulation of foreign coins, but it is simply to "*regulate*" their value, which can mean nothing else than to declare authoritatively what their value is. Colonel Benton (Thirty Years in the Senate, vol. 1, pp. 444, 445) says:

> It was the intention of the Constitution that foreign coins should pass currently as money; this was the design of the States in conferring upon Congress the power of regulating the value of these coins; and all the laws of Congress for preventing the circulation of foreign coins are so many breaches of the Constitution. The only power the Constitution has given to Congress over foreign coins is a power to regulate their value and to protect them from debasement by counterfeiters. It is certainly a most strange construction of that authority to prohibit their circulation.

Section 3582 of the Revised Statutes, declaring that foreign coins shall not be a legal tender, is clearly without support in any constitutional power of Congress, and is therefore invalid. And, furthermore, it is not a correct revision of the act of February 21, 1857, referred to in the margin, because that act contains no prohibition of foreign coins as tenders.

It may be denied that Congress can turn over its power of regulating the value of foreign coins, to be exercised by the executive officers of the Mint. But, on the other hand, it may be claimed that, in the first section of the act of March 3, 1873, since incorporated into the Revised Statutes, Congress does itself regulate the value of foreign coins by defining with exact precision the rule for regulating it, namely, that the value "*shall be that of the pure metal of such coin.*" The operations remaining to be performed, namely, those of assaying and weighing, are purely executive in their nature.

Upon the whole, the view seems to be the sounder one, in respect to coins of gold and silver the value of which is annually proclaimed under section 3564 of the Revised Statutes, that their value is regulated by Congress under its constitutional power of regulating it.

On this view, such coins are legal tenders without any special action in the premises by the States, and, indeed, could not be deprived of their legal-tender capacity by the States. Foreign coins, the value of which is regulated by Congress, are on the same constitutional footing with coins struck under the authority of Congress.

But if it shall be held that the annual proclamations of the value of foreign coins under section 3564 of the Revised Statutes are not a proper and effective exercise of the power of Congress to regulate the value of foreign coins, the States may themselves, if they shall see fit to do so, regulate the value of such coins until Congress shall effectively exercise its power in this regard. The power of regulating the value of foreign coins possessed by Congress is not an exclusive power, either by the terms of the grant or by its intrinsic character. It is not prohibited to the States, and may therefore be exercised by them, if Congress does not exercise it.

The authorities on this point are harmonious. They will be found collated by Chancellor Kent, (*Commentaries*, vol. 1, page 387, *et seq.*,) who deduces and lays down the true rule:

> The mere grant of a power to Congress does not imply a prohibition on the States to exercise the same power. Thus, Congress is authorized to establish uniform laws on the subject of bankruptcy, but the States may pass bankrupt laws, provided there be no acts of Congress in force establishing a uniform law on that subject. The States may legislate in the absence of congressional regulations. It is not the mere existence of the power, but its exercise, which is incompatible with the exercise of the same power by the States.

This has been so held by the Supreme Court of the United States, in Houston *vs.* Moore, (5 Wheaton, 1,) of which case Chancellor Kent says:

> The doctrine of the court was that when Congress exercised its powers upon any given subject, the States could not enter upon the same ground and provide for the same objects.

It is proper to be noted as a part of the history of this part of the Constitution, that, under the articles of confederation, Congress possessed the coinage power, not exclusively, but concurrently with the States, and did not possess at all the power of regulating the value of foreign coins. The changes made by the Constitution gave the coinage power to Congress exclusively, by prohibiting the States from coining, and also gave to Congress the new power of regulating the value of foreign coins. The words of the grant of power in the articles of confederation are:

> The sole and exclusive right and power of regulating the alloy and value of coin struck by their own authority, or by that of the States.

Story (Commentaries on the Constitution, 1117) says:

> Under the Confederation, there was no power given to regulate the value of foreign coin; an omission which, in a great measure, would destroy any uniformity in the value of the foreign coin, since the respective States might, by different regulations, create a different value in each. The Constitution has, with great propriety, cured this defect.

See, to the same effect, The Federalist, No. 42. As will be noticed, Judge Story treats the right to make foreign coins a tender as unquestionably belonging to the States, subject to the power of Congress to regulate the value of such coins. There is no other restriction on it, and if Congress does not see fit to exercise this regulating power, the right of the States may be exercised by them at their unlimited discretion.

There are many reasons, some of convenience and others of high expediency, which require the free circulation of foreign coins. The striking of money is expensive, especially of silver money, and it is a useless tax, either upon the Government or individuals, to require that coins issued by mints as reputable and as reliable as our own, should be recoined at our mints. The managers of our mints compute the actual cost of silver coinage at one and a half per centum of the value. Their dealings with customers in the matter of trade-dollars are made on that basis. Our commerce has always brought the Mexican dollar into this country in good abundance. No more reliable dollar was ever manufactured, and it deserves the world-wide reputation which it enjoys. Whatever disorders there may have been in other branches of Mexican administration, the mint of that republic has always been admirably managed, and still is so. It is a flagrant abuse to subject our citizens who receive the Mexican dollar in lawful commerce to a loss of one and a half per centum in the conversion of that dollar into another which is no better in any respect, and to the additional loss of the time consumed in the operation. The Mexican dollar was the successor of the old Spanish dollar in our circulation, and no coin was better approved in this country when silver was a part of the circulation.

The managers of our mint have the natural desire to enlarge its operations. Personal importance is magnified by such enlargement, and so is patronage. All official bureaus and departments have the same interest. Even courts are not exempt from this infirmity, as it is one of their approved maxims that it is the part of a good judge to enlarge his jurisdiction. There can be no doubt that in the history of this Government there has always been more or less of influence exerted by the officials of the mint in the direction of compelling an unnecessary and wasteful recoinage of classes of foreign coins which have been in no degree improved by recoining.

If the States shall enact that the Mexican silver dollar, or any other foreign coin, gold or silver, shall be a legal-tender at the valuation fixed in the annual proclamations of the Secretary of the Treasury, such legislation, *quacunque via data*, must be good. It would be good, although merely cumulative and superfluous, if such proclamations are an effective exercise of the power of Congress to regulate the value of foreign coins. And it would be good if such proclamations are not an effective exercise of the power of Congress, because the States can regulate the value of foreign coins if Congress does not exercise its power in that respect.

REVISION OF 1874 OF THE LAWS OF THE UNITED STATES.

The laws known as the Revised Statutes of the United States were enacted in bulk in June, 1874, by Congress, under the assurance of the committee of revision that they were a consolidation of the pre-existing laws, without any change and without the introduction of any new matter.

Judge Poland, of Vermont, was one of the members of the House committee on the revision. On the 4th of January, 1876, he had occasion, in a letter to the Secretary of the Treasury, to discuss the question whether a certain change in the Revised Statutes changed the custom-house duty on a particular class of wools. He insisted that, as no change of any kind was intended by Congress, the language of the Revised Statutes should not be construed so as to make a change, if such a construction could possibly be avoided. He says in this letter:

> The committee repeatedly and publicly declared in the House their purpose not to have the revision make any change in the law, and in their action on this subject they intended to act with scrupulous regard to this pledge to the House. * * * I understand very well that in the construction of a statute its meaning and purpose must be mainly sought in its own language, but the history of and concurrent circumstances attending legislation have often been considered in determining the true intent and meaning of a statute whose language left its object and purpose obscure and doubtful. So in the construction of any section of the revision, where it becomes a question of doubt and difficulty whether a change of law was intended, the fact I have stated above—that the committee so often and so publicly declared their purpose to make no change, and upon which Congress acted—is a matter proper to be considered.

The Congressional Record will show that the statements made by Judge Poland in this letter of January 4, 1876, as to the assurances given to the House by its committee on the revision, are entirely correct. One member of that committee, General Butler, with his accustomed energy of expression, declared to the House that the Revised Statutes proposed for their approval contained "not one word and not one letter" of new matter.

Bearing in mind what Congress intended to do, and supposed it was doing, when it adopted the Revised Statutes in 1874, the inaccuracy of the revision on page 712, being title xxxix, will become apparent.

Section 3586 of this revision reads as follows:

> The silver coins of the United States shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment.

No existing law justified this provision, unless it is the law referred to in the margin, and which is the 15th section of the coinage act of February 12, 1873, and is in the following words:

> The silver coins of the United States shall be a trade-dollar, a half-dollar or fifty-cent piece, a quarter-dollar or twenty-five-cent piece, a dime or ten-cent piece; and the weight of the trade-dollar shall be four hundred and twenty grains troy; the weight of the half-dollar shall be twelve grams (grammes) and one-half of a gram, (gramme;) the quarter-dollar and the dime shall be respectively one-half and one-fifth of the weight of said half-dollar; and said coins shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment.

Inasmuch as all the provisions of the coinage act of February 12, 1873, authorizing the striking of the trade-dollar, half-dollar, quarter-dollar, and dime are transferred to, and now form a part of, the Revised Statutes, a correct revision of the 15th section of the act of February 12, 1873, would have been to prescribe, not that all the silver coins of the United States, but that the silver coins *authorized to be struck by the Revised Statutes*, should be a tender for five dollars and no more. This would have left the law just as it was left by the act of February 12, 1873, which contains no such thing as a sweeping demonetization of all the silver coins authorized and struck prior to its date, and of all silver coins which might be authorized by subsequent Congresses. The "said coins," limited in their tender capacity to five dollars by the act of February 12, 1873, are precisely described, and they are the trade-dollar, half-dollar, quarter-dollar, and dime. They are all of peculiar weights, differing from the old standard dollar of four hundred and twelve and one-half grains. One of them, the trade-dollar, was wholly new to our legislation, and was intended exclusively for export to the East. The others corresponded very nearly to the underweighted coins authorized twenty years before, and which had never been a tender for more than five dollars. The act of February 12, 1873, did not reduce to five dollars the tender capacity of the old standard dollars which might still be in existence, or of the silver coins of a less denomination than one dollar which were struck prior to 1853 and were of full weight, and great numbers of which still exist and have re-appeared in actual circulation within the past year.

It is true that the striking of any other silver coins than those enumerated in the 15th section of the act of February 12, 1873, is prohibited by the comprehensive language of the 17th section, which reads as follows:

> No coins, either of gold, silver, or minor coinage, shall hereafter be issued from the mint other than those of the denominations, standards, or weights herein set forth.

But what one Congress does another Congress may undo, and it has frequently happened that laws are altered by the same Congress which enacted them. The reason actually assigned in 1873 for dropping the coinage of the old standard dollar was that, in the then market relation of the two precious metals, it was worth 103 cents in gold, and therefore could not be kept in circulation. But the market relation of the metals might change, and has in fact changed. The views prevailing in Congress might also change, as they have often changed in times past, as to the coins they would authorize.

If any Congress, subsequent to 1873, authorized the striking of the old standard dollar, the full tender capacity of such dollar would not be affected by the 15th section of the act of February 21, 1873, which applies only to the "*said coins*" enumerated in it. But such a dollar, if authorized after June, 1874, would be, by the Revised Statutes, reduced to a tender capacity of five dollars.

The variance is vital, between the 15th section of the act of February 21, 1873, and section 3586 of the Revised Statutes. The 15th section (1873) limits the tender of four specified silver coins, differing in weight of silver from the old standard dollar. Section 3586 (1874) limits the tender of all silver coins, present, past, and future. It applies not only to the four silver coins then authorized, but to all the silver coins which had been struck prior to 1873, and many of which in actual existence were full legal tenders, notwithstanding the act of February 21, 1873. And it will apply, by legal construction, to all silver coins hereafter authorized by Congress, and not specially excepted from its operation.

Section 3584 of title xxxix of the Revised Statutes is as follows:

> No foreign gold or silver coins shall be a legal tender in payment of debts.

As already stated, it appears from the marginal reference that this is claimed to be a revision of the 3d section of an act passed February 21, 1857, relating to foreign coins. And, as already shown, whatever may have been the practical effect of that act, or whatever may have been the object of its framers, it contains no such language as that "*no foreign gold or silver coins shall be a legal tender in payment of debts*," nor any approximation to such language. What it does is to repeal "all former acts authorizing the currency of foreign gold or silver coins, and declaring the same a tender in payments of debts," which left the case precisely as if Congress had never legislated on the subject at all, unless subsequent clauses of the act are construed to prescribe a new regulation of the value at which foreign coins may be current. In no part of it, and by no possible construction, does the act prohibit the currency of foreign coins, or declare that they shall not be "*a legal tender in payment of debts.*"

The duty of revisers and consolidators of laws in such a case seems to be very plain. It is simply to leave out of the revision the laws which are repealed. Indeed, there is nothing left to be revised. What the effect may be of the non-existence of any law of Congress "authorizing the currency of foreign gold or silver coins," whether because no such law was ever enacted, or because all such laws may have been repealed, is a question with which revisers have no proper concern. But in this case they have gratuitously and most strangely assumed that to repeal laws which fixed particular rates at which foreign coins should have currency, is the same thing as prohibiting their currency.

One erroneous revision, tending to effect a particular object, may excite only a suspicion that the error arose from design and not inadvertence. But two erroneous revisions, both tending to effect the same object, change the suspicion into an almost conclusive conviction. When to a surreptitious introduction into the Revised Statutes of words demonetizing all the silver coins of the United States, is added the surreptitious introduction of words prohibiting the currency of foreign silver coins, the design being masked against casual observation by the generality of a prohibition of the currency of foreign coins, both gold and silver, it is impossible to doubt that the laws of the country have been tampered with. Who the perpetrators of this crime were, is not likely ever to be satisfactorily known. It is by no means certain that they were the persons officially connected with the revision. The artful suggestions which mislead those who draught laws often come from outside and unsuspected parties.

It may be said, in respect to these criticisms upon the revision to be found in title xxxix, that even if well justified they are without practical importance, because the Revised Statutes must be interpreted and enforced according to the language actually found in them. But when the question of the constitutionality of any part of the Revised Statutes is presented for judicial decision, it will be found to make the greatest possible practical difference, whether such part was adopted knowingly and intentionally by Congress, and truly represents its will, or crept into the law through the blundering or design of clerks, committees, copyists, revisers, enrollers, or other persons. Courts uniformly declare that a proper deference to the law-making power requires them to presume that laws are constitutional unless the contrary plainly appears. They regard the setting aside of laws on the ground of unconstitutionality as involving a grave and weighty responsibility, to be assumed only after cautious consideration. Courts would regard in a very different light any sections of the Revised Statutes which proved, upon examination, to be not revisions, but perversions of the laws. And if such perversions, whether the result of ignorance or design, are also "*breaches of the Constitution*," as the section prohibiting the currency of foreign coins manifestly is, the courts, which pronounce them to be so, will not overrule any decision of Congress, but will protect that body against what is really an invasion of its authority.

It may turn out that the courts may be able, by a courageous use of the resources of construction, to interpret section 3586 of the Revised Statutes as confined to the particular silver coins, to the striking of which the Revised Statutes restrict the Mint. Such a construction would make the section what it ought to be, by making it conformable to the act of February 12, 1873, referred to in the margin of it, and of which it should be a transcript without change of substance.

THE STATES CAN MAKE ANY GOLD OR SILVER COINS OF THE UTITED STATES LEGAL TENDER FOR ALL SUMS.

It is sometimes said that the States cannot give the capacity of full legal tender to the silver coins, the striking of which is authorized by the present laws of the United States, because they are under-weighted, with the exception of the trade-dollar, which is intended exclusively for foreign purposes. To this two answers may be made, either of them sufficient.

There is no standard silver dollar authorized by law, or any other standard, by comparison with which the present half-dollars, quarter-dollars, and dimes can be said to be under-weighted, and in no sense whatever are they under-weighted.

Taking the weights of these silver coins and the weights of the gold coins as now prescribed, the relation between gold and silver is 14.95 to 1, which varies very little from the relation of 15 to 1 fixed by Mr. Hamilton in 1792. At the present market relation of silver to gold, the relation of 14.95 undoubtedly overvalues silver; but the present market relation is admitted to be abnormal. In the opinion of many well-informed persons, the paramount and controlling tendencies, founded upon the facts of mining, are toward an appreciation of silver. But, however that may turn out, the right of Congress to establish the relation of 14.95 to 1, or any other relation, is unquestioned and unquestionable.

But if the half-dollars, quarter-dollars, and dimes are now under-weighted, or if they shall become so hereafter, by the striking of a silver dollar of a different proportional weight, the right of the States to make them a tender for all sums is not and will not be affected. Whatever their weight may be, they will be silver coins of the United States, and it is a scandalous and altogether inadmissible supposition that the Government of this country will ever issue coins for the purposes of profit, the equality of which in market-value with all other coins it does not adequately secure, by limitation of quantity, redemption in other coins, receivability for taxes, or some other effective method. No government in Europe issues any such fraudulent coins, or would dare to do it. It is in small silver coins that the wages of labor are paid, and it is not to be assumed as possible that the Government of this country will ever issue such coins without maintaining their full value. If such a thing is possible, and shall actually occur, it may be a question whether it would not then become the special duty, as well as right of the States, to preserve such coins from discredit and depreciation by making them a full legal tender.

LEGISLATION IN EUROPE AND THE UNITED STATES IN RELATION TO SUBSIDIARY SILVER COINS MINTED BELOW WEIGHT OR STANDARD.

Silver was adopted January 24, 1857, as the exclusive standard by all the German states, then including Austria. This was done by what is called the Vienna Coin Convention. This convention provided also for a subsidiary silver coinage, to be a tender for an amount not exceeding the value of the smallest coin of full weight and standard issued by the states respectively, and each state was bound to redeem these subsidiary coins in other coins of full weight and standard and having the capacity of unlimited legal tender.

In Spain, by a royal decree of October 19, 1868, a subsidiary silver coinage was provided $\frac{835}{1000}$ fine, the Spanish standard being, like the French, nine-tenths fine. These subsidiary coins were made a tender for not exceeding fifty *pesetas*, (about $9.30.) But the decree adds that "*the state, however, will receive them from the tax-payers without limitation.*"

The subsidiary silver coinage of France, Italy, Belgium, and Switzerland, constituting the Latin union, is regulated by the convention between them of December 25, 1865. It is not under-weighted, but is below standard, being $\frac{835}{1000}$ fine, whereas the standard of those countries is nine-tenths fine. It is made a legal tender to an amount not exceeding fifty francs, but only to the citizens of the country issuing it. This coinage of each country is made receivable for taxes in all the countries comprising the Latin union for any amount not exceeding one hundred francs; but in the country issuing it, this receivability is "*without limitation of quantity.*" And each country is obliged to redeem its subsidiary coins in coins of full standard, when presented in sums not less than one hundred francs, by either the governments or citizens of the other countries. The last provision remains in force for two years after the convention expires.

The silver and other minor coins of Germany, which are tenders for only small sums under the new monetary *régime* of the single gold standard, are regulated by the law of July 16, 1873, article 9 of which directs that the silver coins shall be received at the treasuries of all the states and of the empire for all sums, and further directs that the Federal Council shall designate public treasuries where redemption shall be made in gold, of silver coins when presented in sums not less than 200 marks, (about $50,) and of nickel and copper coins when presented in sums not less than fifty marks. Article 10 directs that pieces of silver, nickel, and copper reduced by wear below weight shall be accepted for taxes at their nominal value at all public treasuries, and be retired from circulation, and that the loss shall be borne by the empire.

The law of Holland of 1875, providing (among other things) for subsidiary silver coins to be a tender for twenty florins, (about $8,) makes them receivable in any amount for all taxes. And it also provides that such coins, when presented in sums not less than fifty florins, and bronze coins when presented in sums not less than five florins, shall be redeemed by the government in gold, or in such silver coins as have the capacity of full legal tender.

The adoption of the single gold standard by the Scandinavian states, and the issue of silver coins as a tender for small sums, was arranged by a monetary treaty (December 18, 1872) between Sweden and Denmark, and by a law (June 1, 1873) of Norway. In both the treaty and the law it is provided that these coins shall be received for all taxes until they are so much worn that it cannot be seen by what country they are issued, and that they shall be redeemed in gold, when presented in any sum divisible by ten crowns. And this last provision is made also in respect to the bronze coins.

The British law of 1816, establishing the single standard of gold, but authorizing silver coin as a tender for forty shillings, ($9.72,) had the peculiarity that it did not restrict this subsidiary silver coinage to the government. Any owner of silver sufficient to make sixty-two shillings on the relation between gold and silver as existing in England since 1717, could have it coined, but the mint struck from it sixty-six shillings, of which it retained four for all charges and as a profit, and delivered sixty-two to the depositor. The security against an oversupply of subsidiary coins was, that silver would not be brought to the mint if sixty-two coined shillings were less valuable in the market than silver enough to have been coined into sixty-six shillings.

Undoubtedly this did adequately secure an equality of market-value between sixty-two coined silver shillings and a weight of silver bullion sufficient for sixty-six such shillings. And it also adequately secured an equality of market-value between twenty coined silver shillings and a sovereign, or a pound sterling in gold, so long as silver did not depreciate sensibly in the market below the relation of silver to gold established by the British mint regulations.

The British coinage act of 1870 does not contain the provision of the act of 1816, which authorized anybody to carry silver to the mint for coinage. The practice under the act of 1870 has been the same, however, as it had been during many years previously, all the dealings with the mint for the coinage of both gold and silver, for the supply of England, being carried on by the Bank of England. If its stock of silver coins accumulates, it ceases to procure their further coinage until the current changes and a declining stock threatens a scarcity. The same office is performed for Scotland and Ireland by the banks of those parts of the British Empire. An examination of the annual reports of the master of the mint, for several years before as well as after 1870, shows no deliveries of silver coin outside of the Bank of England and the Irish and Scotch banks, except small sums for the military chests of troops stationed elsewhere than in the United Kingdom, and occasionally for the supply of the governments of those colonies which have no mints.

Neither the act of 1816 nor that of 1870 provides for the redemption in gold, or receivability for taxes, of the silver coinage. But neither act prohibits or limits such receivability in any branch of the revenue, nor is any such prohibition or limitation supposed to be enforced in practice. The Bank of England, which is the principal depository of government funds, can have no reason for declining to receive silver coins, when it is constantly purchasing them at the mint at full prices.

The European precedents seem to be uniform, therefore, in favor of the policy of securing an actual equality of market-value between subsidiary silver coins deficient in weight or standard and other coins. It is not believed that there is any case in Europe in which a government issuing coin has repudiated and discredited it by refusing to receive it for any debt or tax of any description.

The precedents in this country are the same way, with a single unimportant and very temporary exception, that of the silver three-cent piece as it was originally coined, three-fourths fine, under the act of March 3, 1851. The act of August 31, 1852, prohibiting the receipt for government dues of coins below the regular standard of nine-tenths fine, would apply to the three-cent piece as originally coined, but ceased to be applicable after March 3, 1853, when that coin was directed to be struck of the full standard.

The silver coinage under the act of February 21, 1853, being of full standard, although under weight, did not come within the prohibition of the act of August 31, 1852, nor does the silver coinage issued under the laws as codified in the Revised Statutes of 1874.

The same policy of securing to small money an equality of relative value with large money, governed the legislation of this country in respect to the paper issues of the period of the civil war. It is true that those who then controlled public affairs established two moneys, but they did not establish one money for small transactions and another money for large transactions. They established two moneys for different classes of debts, with no reference to their magnitude. All ordinary persons were compelled to receive paper for their debts, however large, while bondholders were promised and secured payment in coin of the interest on their bonds, however small the amount might be.

In the paper issues there was a fractional currency, but this had secured to it an equality of relative value with paper of the highest denominations, by redemption in such paper.

This provision made the fractional paper currency, although not a legal tender for any sum, great or small, actually equal in market-value and current acceptability to the greenback.

The theory of this legislation, thus uniform in Europe and the United States, manifestly is, that the money in which wages are paid and retail transactions are carried on should be practically interchangeable without discount, with money of the largest denominations. An inferior currency for small transactions, and a superior currency for large transactions, would subject laborers to constant loss, not merely in the payment of such debts as could not be discharged in the inferior currency, but in all their ordinary purchases. Goods bought at wholesale, and therefore with the superior currency, could not be retailed for the inferior currency without such an addition to their price as would cover the difference of the two currencies.

Tender for private debts, and receivability for taxes and other duties to the United States, are things entirely distinct and independent of each other. Special laws have always defined exactly and specifically what the United States would receive. The existing laws, as consolidated in the Revised Statutes, do so. There are no limits upon the discretion of Congress in the enactment of such laws, except that they must observe the rule of uniformity as respects persons and localities. Any kind of money might be refused, and taxes collected in kind, in cases admitting of that mode of collection. The Treasury notes issued under the act of February 25, 1862, are a legal tender for private debts of every description and for all amounts, but they are not receivable for import duties. The fractional paper currency is not a tender for any amount, nor are national-bank notes, but under acts of Congress they are receivable in certain branches of the public revenue, this receivability being limited, in the case of the fractional currency, to a specified sum. The whole history of legislation in the United States shows that questions of tender for private debts and of receivability for taxes have no connection with each other.

The existing laws which control the kind of moneys to be received for the several descriptions of dues to the United States are as follows:

Section 962 of the Revised Statutes prescribes that in suits for the recovery of custom-house duties the judgments obtained shall be "*payable in the coin by law receivable for duties.*"

Section 1746 is in the following words:

> All fees collected by diplomatic and consular officers for and in behalf of the United States shall be collected in the coin of the United States, or at its representative value in exchange.

Section 3009 is in the following words:

> All duties upon imports shall be collected in ready money, and shall be paid in coin, or in United States notes payable on demand, authorized to be issued prior to the 25th day of February, 1862, and by law receivable in payment of public dues.

Section 3473 is in the following words:

> All duties on imports shall be paid in gold and silver coin only, or in demand Treasury notes, issued under th authority of the acts of July 17, 1861, chapter five, and February 12, 1862, chapter twenty; and all taxes and all other debts and demands other than duties on imports, accruing or becoming due to the United States, shall be paid in gold and silver coin, Treasury notes, United States notes, or notes of national banks.

Section 3474 is in the following words:

> No gold or silver other than coin of standard fineness of the United States shall be receivable in payment of dues to the United States, except as provided in section 2306, title Public Lands, and in section 3567, title Coinage, Weights, and Measures.

Section 2306, referred to in section 3474, provides as follows:

> The gold coins of Great Britain and other foreign coins shall be received in all payments on account of public lands, at the value estimated annually by the Director of the Mint, and proclaimed by the Secretary of the Treasury in accordance with the provisions of section 3564.

Section 3567, referred to in section 3474, fixes the special rates at which the quarters, eighths, and sixteenths of the Spanish and Mexican silver dollars shall be received at the post-offices and land-offices.

In the margin of section 3474, reference is made to the second section of an act making general appropriations for civil purposes, approved August 31, 1852. The words of the section referred to are as follows:

> No gold or silver other than coin of standard fineness of the United States, or foreign coin in the manner prescribed by existing laws, shall be receivable in payment of dues to the United States.

It seems clear that all the silver coins now authorized to be struck at the mints are receivable for all dues to the United States. They are of "*standard fineness*," as required by section 3474 of the Revised Statutes, which is a revision, in that respect, of the act of August 31, 1852.

Precisely the same language, which is the only legal warrant for receiving them for "*all taxes and all other debts and demands other than duties on imports*," makes them receivable for "*all duties on imports*," and if their receivability is prohibited or limited in respect to customs-dues it must be prohibited or equally limited in respect to all dues.

It may be true that the receiving of subsidiary silver coins at the custom-houses would carry them to so near a parity with gold as to render it impossible to keep them in use as a fractional money, so long as the actual currency of the country consists of legal-tender paper. That consideration, however, has nothing to do with the construction of existing laws, but addresses itself to those who have the power to make new laws.

It is said that efforts are being made to induce the Treasury Department to hold that, under existing laws, subsidiary silver coins are not receivable at all at the custom-house, and that for other taxes and dues to the United States they are receivable only to the extent of five dollars in any one payment.

It is not easy to conjecture upon what view of the meaning of words in existing laws either of these proposed constructions is possible. It is less difficult to foresee what their effect would be if they should be adopted.

To refuse the subsidiary silver coins at the custom-houses would prevent their attaining a parity of market-value with gold.

To restrict their receivability for taxes and dues which are payable in greenbacks to five dollars in any one payment would tend to depreciate them below the greenback, inasmuch as there is no such provision for their redemption in greenbacks as there was and is in respect to the fractional paper currency. The extent of their depreciation, down to the limit of their bullion-value, would depend upon the amount issued, as that may be regulated, and changed from time to time, by laws, or by executive constructions of law. There would thus be substituted for the fractional paper money underweighted and overvalued silver coins, discredited by the Government issuing them, and exposed to the danger of serious depreciation. The profit resulting from their issue is a constant temptation to enlarging the amount issued, and the checks of receivability for taxes or of redemption will not exist. There is certainly no precedent for such a policy of lowering the value of the money of all the smaller transactions of life to be found in the past history of legislation in this country, or in the practices of the civilized governments of Europe. The poor are entitled to as good money as the rich, although they may have less of it, and no laborer should be compelled to receive his wages in anything which will not, by some conversion in the market without loss, pay off the mortgage on his house, or any other debt which he may owe, and which does not have as great a purchasing power, dollar for dollar, as the money of other classes in the community.

The losses will not be confined to laborers, although they will bear the larger part of it. Retail-dealers in merchandise can indemnify themselves against inferior money by higher prices, but there are many receipts, in the nature of fixed charges, where that species of indemnification is not practicable. In such cases, the receiving party must bear the loss. He will submit to it if he must, but if his position is an independent one, he will reject the money altogether; and every such rejection increases its depreciation.

The objection is to investing any form of subsidiary paper or coined money with the legal-tender function for the small sums in which wages are paid and in which retail transactions are made, without in some way keeping it on an equal plane of value and currency acceptability with the money which may be the full tender in actual use. Such a system despoils laboring men by a sure although insidious process. The fractional money which they necessarily receive in payment of their wages will not, under such a system, pay the large debts which they may owe, except at a discount, and while it is nominally received at par in the small purchases which they make, prices are and must be raised upon them, which is practically the same thing as obliging them to part with their money at a discount.

Refusing to receive the subsidiary silver coins at custom-houses is not open to this objection. Such a measure would tend to deprive them of a parity of market-value with gold, but although a full tender, gold is not in actual use as such, there being another full tender which is more available. But the objection does lie against refusing or restricting their use in discharging any taxes or dues to the United States, which may be discharged by the United States notes which constitute the money in actual use.

Whether the legal-tender function ought to be given to debased or under-weighted silver coins, and whether, if given at all, it should be limited to any particular sum, and, if so, to what sum, are questions which have been very little discussed in this country. A debased silver three-cent piece was authorized March 3, 1851, but the striking of debased, or under-weighted, silver coins, on any scale to attract attention, was first authorized by the act of February 21, 1853, which was framed by the Finance Committee of the United States Senate. The accompanying report of the chairman of that committee, Mr. Hunter, of Virginia, which is elaborate and signally able, was mainly confined to an exposition of the mischiefs of a single standard of either gold or silver.

The practical difficulty existing at the time was the premium on silver as measured in gold. The obvious expedients to keep silver coins from the melting-pot and from exportation, and to retain them in the home circulation, were, either to debase them, or strike them below weight, the latter expedient being the one actually adopted. The provision making them a tender for small sums, and for small sums only, seems to have been adopted from the English precedent with very little consideration, and especially without attention to the circumstance that gold was the exclusive standard in England, and that silver was on no better footing there than copper, whereas here it had the same rank as gold.

It is plain enough that the argument of necessity for giving the legal-tender function to underweighted silver coins, can go no further than to justify giving them that function for sums below the denomination of the smallest full-weighted coin. That was the principle which regulated the old English royal proclamations making copper coins a tender, but only for sums below the smallest English silver coin, which was a sixpence. And it is the principle which governed the Vienna coin convention of 1857.

Since 1862, this country has had a long experience with a fractional paper currency, which answered perfectly well all the purposes of such a currency without being made a legal tender for any sum. It did so by being kept always equal in market-value with the full-tender United States notes by redeemability in such notes. It is probable that an equal receivability for taxes would have accomplished the same result without redemption.

It being the practice of governments to control the issue of subsidiary coins, deficient in weight or standard, receivability for taxes seems to be a sufficient check against overissues. If the channels of circulation of that class of coins are overcharged with them, the excess will return to the public chest in the revenue receipts. There will be an ebb and flow with the fluctuations of trade and business activity, but the limits of the ebb and flow will not be inconveniently great.

But while the fractional paper currency was entirely acceptable by reason of its redemption in full-tender United States notes, without being itself a tender for any sum, it is not apparent that any evils would have resulted if it had been made a tender for limited sums, or even for all sums.

THE TRADE-DOLLAR.

In December, 1876, Dr. Linderman, Director of the United States Mint, invited, from the presidents of certain banks in San Francisco, facts and opinions in respect to the utility to commerce with China of the trade-dollars, which are called "Trades" on the Pacific coast.

Louis McClane, president of the Nevada Bank of San Francisco, replied December 28, 1876, as follows:

> They have the advantage of being legal tender in Foo-Chow, Saigon, Singapore, and Hong-Kong, and also are received in payment of custom duties at the three first-named ports, and at Canton. Have heretofore been weighed at Hong-Kong. Will be taken by count after the 1st proximo for sixty days as an experiment, probably as an entering wedge to its permanent adoption as a legal tender by count.

D. O. Mills, president of the Bank of California, replied, December 11, 1876:

> We understand the trade-dollar to be a legal tender at Canton, but at the other ports it passes as an ingot of silver, according to its weight and fineness.
>
> Our experience shows that the Chinese merchants give preference to the trade-dollars over drafts on China payable in local currency.

F. F. Low, president of the Anglo-California Bank, replied, December 12, 1876, that in China silver bullion, usually called *sycee*, is cast into ingots by the bankers and melters, each port having its peculiar standard or *touch;* that such ingots are current according to the weight of pure silver in them; that this weight is expressed in *taels*, (the *tael* being about one ounce,) and that the exact weight of the *tael* varies in the different ports. Mr. Low says further:

> Spanish dollars found their way into China when foreign trade commenced, and by usance became known to the people in all the maritime provinces. Their uniform weight and fineness soon fixed their value, as compared with the tael, and (they) were for many years almost exclusively used in settlement of purchases of tea and silk made for foreign merchants.
>
> Subsequently Mexican dollars were introduced, and in course of time practically supplanted the Spanish dollar. Recently the trade-dollar of American coinage has been introduced. This coin was received with hesitation at first, but upon repeated tests of its weight and fineness being made, its intrinsic value became fixed, and at the present time it is received with great favor at the ports of Canton, Swatow, Amoy and Foo-Chow. Indeed, so reliable has this coin proven, that the viceroys of the provinces of Kwang-tung and Fokien (in which the four ports above mentioned are situated) have ordered that they be received in payment of customs duties, at their standard value, as compared with the tael. At Hong-Kong they have been current at a premium over the local bank-paper currency, nearly or quite equal to that ruling for Mexican dollars.
>
> The ignorance of the people regarding everything of a foreign origin, makes them suspicious; hence, they always incline to adhere to the *old* and reject everything *new;* and in the matter of introducing new coins into China, the difficulty is enhanced in no small degree by the hostility of the native and foreign banks and bankers whose profits are lessened by the introduction and use of a coin of uniform weight and fineness.

The basis upon which these trade-dollars are received at certain Chinese custom-houses, will appear from the following proclamation issued in October, 1873, by the governor-general of the two Kwang provinces, the governor of Kwang-tung, and the superintendent of customs for the Canton province:

> Whereas the foreign silver (coin) in daily use among the people of the Kwang-tung provinces has long been in circulation, and is moreover admitted to be advantageous and convenient. In the 5th and 11th years of Tung-Chih, (1866 and 1872,) the Hong-Kong mint coined a new dollar, which, upon comparison with pure silver, bore a proportion of fully 90 per cent., and as the records will prove. Proclamations were issued notifying the people that it might come into general circulation. There has lately come to Hong-Kong a newly-coined American eagle-dollar called the "trade-dollar," and Sir Brooke Robertson, the British consul, having requested that officers might be appointed to assay it, the viceroy thereupon appointed officers to melt it down and assay it, in concert with an officer from the British consulate, when, taking the Haikwan tael of pure silver as the standard, an outturn was obtained of fully 89.91; or, taels 111.6 of this new eagle-dollar are equal to 100 Haikwan taels of pure silver. Minutes of the assay were drawn up in proof thereof.
>
> For the convenience of traders and people, therefore, this coin should be allowed to be tendered in payment of duties at the rate of touch obtained at the assay, and to come into general circulation. It becomes the duty, then, of the viceroy and his colleagues to issue a proclamation on the subject for general information.
>
> This proclamation, therefore, is for the information of you merchants, traders, soldiers, and people of every district. You must know that the eagle "trade-dollar," that has lately come to Hong-Kong, has been jointly assayed by officers specially appointed for the purpose, and it can be taken in payment of duties and come into general circulation. You must not look upon it with suspicion.

It is very clear that the trade-dollar has no recommendation for use in China over any silver coin which might have been struck at our mint, and that in particular it has none over the old American silver dollar. The Chinese accept silver coins only for the actual amount of pure silver which they contain. The trade-dollar contains 420 grains, nine-tenths fine. It would have been equally acceptable, on a proportionate valuation, at a weight of 350 grains, or of 412½ grains, which was that of the old American silver dollar. The trade-dollar was authorized by the same act (1873) which prohibited the coinage of the old dollar, and will become useless, and worse than useless, if the old dollar is revived. Two dollars of the same standard, but different weights, can only lead to confusion and discredit.

The trade-dollar appears to have been useful in the absence of a dollar, which is a tender and lawful money in this country, but it is attended with the inherent difficulty that it will not exist in sufficient stock to meet the wants of commerce, unless the Government keeps it in stock, and this involves a heavy expense in the loss of interest.

The trade-dollar, not being a tender and money here, cannot be kept on hand by individuals or banks in San Francisco at a less expense than three-fourths of one per cent. per month, reckoning the annual interest of money in that city at nine per cent. At that rate of cost for keeping it in stock, either no quantity will be kept sufficient for the demands of Asiatic commerce, or, if it is kept, the cost of keeping it will so enhance the price of the coin as to make it unavailable.

Louis McClane, in the letter before quoted from, points out the difficulty and suggests a remedy:

> If the mint had a sufficient number of Trades on hand to meet the demand for any one steamer for China, say $500,000, so that orders from London could be filled promptly and with certainty, the greater portion of our silver product available for export would be sent to China in the form of trade-dollars.

It would seem from this that there is now no certainty of an ability in San Francisco to fill at once an order for even a sum comparatively so small as half a million of dollars. If dollars are useful at all in our Asiatic trade, there should be a capacity there to fill any day an order for ten times that amount. Such a capacity would exist if dollars were money, and therefore formed a part of the resources of banks and bankers. Undoubtedly also the Government could create such a capacity by a general rule of keeping on hand at the San Francisco mint five millions of trade-dollars. By borrowing the money for that purpose in cheaper markets for money, it could probably do this at a cost of one-half of 9 per cent. per annum. The advantage to commerce may justify the expenditure, but it will be rendered unnecessary by the restoration of the old legal-tender dollar.

The restoration of the American silver dollar to its old rights of coinage and tender would render it practicable to restore the Mexican dollar also to its old position as money in this country, a measure of immense importance to the commercial and financial interests of San Francisco. Being again money, it would always be in ample stock there, and its tendency, already manifested, to flow to that city rather than to London, would be increased and would become irresistible. The direct advantages of that, and its indirect advantages in stimulating the return-trade to Mexico, are obvious.

London is not a consuming market for silver, but an *entrepôt* for it, and the London price is always the Asiatic price, less the costs of all kinds of sending it to Asia. As the price of silver in San Francisco must always be at least as high as the Asiatic price, less the cost of sending it to Asia, and as this cost must be less than the cost of sending it from London, it results that what may be called the natural price of silver, aside from its capacity as a tender, should be somewhat higher in San Francisco than it is in London. But at even equal prices, San Francisco should attract the bulk of the Mexican silver, inasmuch as the Mexican silver-mines are nearest to the west coast, and as the Mexican silver-shipments are most naturally made and are now in fact largely made from the west coast. These circumstances, tending to make San Francisco, rather than London, the receiving-point of Mexican dollars, and the point from which to export those dollars to Asia, are already beginning to be felt, notwithstanding the advantages of London in capital and in long-established financial and commercial connections. The influence of these circumstances would receive a decisive addition if Mexican dollars were money in San Francisco. In the present position of things there is no demand for them except on or near the sailing-days of the Asiatic steamers, and not always then a sufficient demand to take off all the stock there may be on offer, and the surplus must in that case lie over till the next steamer-day. But for money there is a demand every day, and every hour of every day, and if Mexican dollars were money, the delay in realizing the value of an invoice of them received at San Francisco could never exceed the time consumed in carting them from the ship's side to a bank-vault. That is a matter important everywhere, and especially important in San Francisco, where rates of interest are high, and will remain high for a long period.

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